



## ABBREVIATIONS

AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
AC	ASPHALT CONCRETE, AIR CONDITIONING UNIT
AD	ACCESS DOOR
ADDL	ADDITIONAL
AL	ALUMINUM
AF	AIR FILTER
AHU	AIR HANDLING UNIT
BC	BRASS CAP
BF	BLIND FLANGE
BLDG	BUILDING
BLK WALL	BLOCK WALL
BM	BEAM, BENCHMARK
BOD	BOTTOM OF DUCT ELEVATION
BOT	BOTTOM
BOP	BOTTOM OF PIPE ELEVATION
BV	BUTTERFLY VALVE
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
CA TV	CABLE TELEVISION
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CIR	CIRCLE
CJ	CONSTRUCTION JOINT
CL, C/L	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CONC	CONCRETE
CONT	CONTINUOUS
COR	CORNER
CP	CATHODIC PROTECTION
CS	CHLORINE SOLUTION
CTR	CENTER
CW	COLD WATER
DB	DRY BULB
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DN	DOWN
DTL	DETAIL
DWG	DRAWING
E	ELECTRIC, EAST
EA	EACH
EF	EACH FACE, EXHAUST FAN
EG	EDGE OF GRAVEL
EL, ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
EW	EACH WAY
EWTB	EACH WAY TOP AND BOTTOM
EXIST	EXISTING
EXP	EXPANSION
FCA	FLEXIBLE COUPLING ADAPTER
FD	FLOOR DRAIN
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FL	FLANGE
FLA	FULL LOAD AMPS
FM	FORCE MAIN
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FTG	FOOTING
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
GRD	GRADE
GB	GRADE BREAK
GV	GATE VALVE
HGB	HOSE BIBB OR WALL FAUCET
HL	HIGH LEVEL
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IE, INV EL	INVERT ELEVATION
IF	INSIDE FACE
INV	INVERT
JT	JOINT
L	LEFT
LB	POUND
L	LOW LEVEL
L	MAXIMUM
MCC	MOTOR CONTROL CENTER
MCA	MINIMUM CIRCUIT AMPACITY
MFR	MANUFACTURER
M.G.	MILLION GALLONS
MH	MANHOLE
MIN	MINIMUM
MLP	MORTAR LINED PIPE, EPOXY COATED EXTERIOR
MCP	MORTAR LINED AND COATED PIPE
MJ	MECHANICAL JOINT
MS	MECHANICAL STRUCTURAL
N	NORTH
NC	NORMALLY CLOSED

## ABBREVIATIONS

NTS	NOT TO SCALE
CA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OF	OUTSIDE FACE
OD	OUTSIDE DIAMETER
P.& I.C.D.	PROCESS AND INSTRUMENTATION DIAGRAM
PC	POINT OF CURVE
PT	POINT OF TANGENT
PL	PLATE
PROJ	PROJECTION
PROP	PROPERTY
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PW	POTABLE WATER
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REINF	REINFORCED
REQD	REQUIRED
REQ	REQUIREMENT
ROW	RIGHT OF WAY
RT	RIGHT
SCHED	SCHEDULE
SF	SUPPLY FAN
SMJ	SLEEVE MECHANICAL JOINT
SS, SST	STAINLESS STEEL
ST	STEEL
STD	STANDARD
STA	STATION
T	TOP, THICKNESS
TOC	TOP OF CONCRETE
TB	TERMINAL BLOCK
TS	TUBULAR STEEL
TW	TOP OF WALL
TWO	TOWARDS
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VENT
VB	VALVE BOX
VB+C	VALVE BOX AND COVER
VCP	VITRIFIED CLAY PIPE
VC	VERTICAL CURVE
VD	VOLUME DAMPER
VG	VALLEY GUTTER
VERT	VERTICAL
VTR	VENT THRU ROOF
W	WATER
WB	WET BULB
WP	WORKING POINT
XFMR	ELECTRICAL TRANSFORMER

### GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH MOHAVE COUNTY STANDARD SPECIFICATIONS AND STANDARD DETAILS, AND OTHER COUNTY ADOPTED STANDARDS, UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER, OR UNLESS APPROVED AS A PETITION OF EXCEPTION BY HEARING OF THE PLANNING AND ZONING COMMISSION AND THE BOARD OF SUPERVISORS.
2. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY USE PERMIT FOR ANY WORK TO BE PERFORMED WITHIN THE RIGHT-OF-WAY UNDER THE OWNERSHIP OR CONTROL OF MOHAVE COUNTY.
3. THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. HOWEVER, SUCH REVIEW SHALL NOT PREVENT THE COUNTY FROM REQUIRING CORRECTION OF ERRORS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE. REVIEW AND APPROVAL OF PLANS DOES NOT RELEASE ANY DEVELOPER OR ENGINEER FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS ON SAID PLANS.
4. IMPROVEMENTS WILL NOT BE ACCEPTED UNTIL CERTIFIED RECORD DRAWINGS (AS-BUILTS), INCLUDING ALL TEST RESULTS, HAVE BEEN SUBMITTED AND ACCEPTED BY THE COUNTY.
5. THE DEVELOPER, ANY SUCCESSORS, AND ASSIGNS, WILL HOLD THE COUNTY OF MOHAVE, ITS OFFICERS, EMPLOYEES, AND AGENTS HARMLESS FROM ANY AND ALL CLAIMS FOR DAMAGES RELATED TO THE USE OF THIS DEVELOPMENT AS SHOWN HEREON, NOW AND IN THE FUTURE, BY REASON OF FLOODING, FLOWAGE, EROSION, OR DAMAGE CAUSED BY WATER, WHETHER SURFACE FLOOD OR RAINFALL.
6. DRAINAGE WILL REMAIN IN ITS NATURAL STATE AND WILL NOT BE ALTERED, DISTURBED, OR OBSTRUCTED OTHER THAN AS SHOWN ON THIS DEVELOPMENT PLAN.
7. A FLOODPLAIN USE PERMIT AND FINISHED FLOOR ELEVATION CERTIFICATE ARE REQUIRED FOR ALL PARCELS LOCATED WITHIN THE FEMA DESIGNATED AREAS OF SPECIAL FLOOD HAZARD FOR THE 100-YEAR STORM.
8. ANY RELOCATION, MODIFICATION, ETC., OF EXISTING UTILITIES AND/OR PUBLIC IMPROVEMENTS NECESSITATED BY PROPOSED DEVELOPMENT SHALL BE AT NO EXPENSE TO THE COUNTY.
9. THE CONTRACTOR SHALL FOLLOW ALL BLUE STAKE LAWS AND NOTIFY BLUE STAKE (1-800-STAKE-IT), BEFORE DIGGING.
10. ALL GRADING SHALL CONFORM TO THE UNIFORM BUILDING CODE, AS ADOPTED AND MODIFIED BY MOHAVE COUNTY.
11. WHERE SOIL IS TO BE REMOVED FROM THE SITE, THE CONTRACTOR SHALL DESIGNATE THE LOCATION WHERE THE FILL WILL BE PLACED AND OBTAIN A LETTER FROM THE OWNER OF THAT PROPERTY ALLOWING THE PLACEMENT OF THE MATERIAL. PLACEMENT OF THIS MATERIAL SHALL BE SUBJECT TO THE APPLICABLE REQUIREMENTS AND PERMITS OF THE GOVERNING JURISDICTION.
12. ALL REQUIRED TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
13. EXCEPT FOR THE WORK PERFORMED UNDER THE TERMS OF A FRANCHISE, OR WORK PERFORMED BY A GOVERNMENTAL AGENCY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL WORK IS INSPECTED AND TESTED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER WHO SHALL HOLD A VALID REGISTRATION IN THE STATE OF ARIZONA.

WATER

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" AND "UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.), IN ACCORDANCE WITH A.D.E.Q. ENGINEERING BULLETIN NO. 10, TOGETHER WITH THESE PLANS.
2. THE LOCATION OF UTILITIES SHOWN IS BASED UPON BEST INFORMATION AVAILABLE. THE LOCATIONS AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND BURIED CABLES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION BY CALLING:  
BLUE STAKE 1-800-STAKE-IT  
AT LEAST 2 WORKING DAYS IN ADVANCE. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES IN PROTECTING AND WORKING AROUND THEIR UTILITIES & SERVICE LINES.
3. CONTRACTOR SHALL ACQUIRE & PAY FOR ALL NECESSARY PERMITS.
4. WATER MAIN SHALL BE DUCTILE IRON, MEETING THE DESIGN REQUIREMENTS OF AWWA C-150 AND MANUFACTURER REQUIREMENTS OF AWWA C-151.
5. WATER LINES SHALL BE DISINFECTED IN ACCORDANCE WITH A.D.E.Q. ENGINEERING BULLETIN NO. 8.
6. WATER/SEWER SEPARATION SHALL MEET THE REQUIREMENTS OF R18-4-502C (LATEST REVISION). SEPARATION SHALL BE A MINIMUM OF 2' VERTICAL AND 6' HORIZONTAL.
7. TRENCHING AND BACK FILL SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD SPECIFICATION 601. COMPACTION DENSITIES SHALL BE 95% FROM THE SURFACE TO 2' BELOW SURFACE.
8. CURB STOP WITH FLUSHING PIPES SHALL BE CONSTRUCTED AS REQUIRED BY M.A.G. STANDARD DETAIL NO. 390, TYPE "A", AS AMENDED BY THE CITY OF KINGMAN.
9. ALL FITTINGS FOR WATER MAINS SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD SECTION 752.
10. ALL THRUST BLOCKING FOR WATER LINES SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD DETAIL NO. 380.
11. ALL BLOCKING FOR WATER GATE VALVES SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD DETAIL NO. 301.
12. PAYMENT FOR CONSTRUCTION SHALL BE MADE ON THE BASIS OF UNIT PRICE BID IN THE CONTRACTORS PROPOSAL. ALL ITEMS CALLED FOR ON THE PLANS BUT NOT LISTED IN BID ITEMS SHALL BE CONSIDERED INCIDENTAL. SAID ITEMS INCLUDE BUT ARE NOT LIMITED TO: WATER LINE BLOCKING, NON-METALLIC TAPE, TESTING, SALVAGING MATERIAL, EXISTING UTILITIES CONNECTIONS, ETC.
13. ALL TAPPING SLEEVES, VALVES AND VALVE BOXES ON WATERLINES SHALL MEET THE REQUIREMENTS OF M.A.G. SPECIFICATIONS SECTION 630, AND M.A.G. STANDARD DETAIL NO. 340.
14. WATER METER COVERS SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD DETAIL NO. 310, AND WATER METER BOXES SHALL MEET THE REQUIREMENTS OF M.A.G. STANDARD DETAIL NO. 320.
15. ALL FITTINGS AND VALVES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL VALVES ARE TO BE PLUMB AND HAVE STRAIGHT ALIGNMENT.
16. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH M.A.G. SECTION 610-14, AND IN ACCORDANCE WITH M.A.G. SECTION 610.14 FOR DUCTILE IRON PIPE.
17. ALL EXISTING STREET PAVEMENT DISTURBED BY CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH M.A.G. STANDARD DETAIL NO. 200-1.
18. UTILITY FACILITIES, SHOWN OR NOT SHOWN IN CONFLICT WITH THIS WORK SHALL BE RELOCATED BY THE GENERAL CONTRACTOR AS REQUIRED. THIS ACTIVITY SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY TO PREVENT ANY UNNECESSARY INTERRUPTION OF SERVICE.

FEMA FLOOD CONTROL

FLOOD ZONE DESIGNATION: FEMA-C

## SITE GRADING

ALL CONSTRUCTION SHALL CONFORM WITH THE SOILS  
REPORT PREPARED BY AMERICAN SOILS ENGINEERING, LLC.  
DATED FEBRUARY 9, 2006  
PROJECT No. 1125-GEO.


ENGINEER'S NOTES

1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLYING CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS, AND SHALL NOTIFY THE ENGINEER OF ALL DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORK.

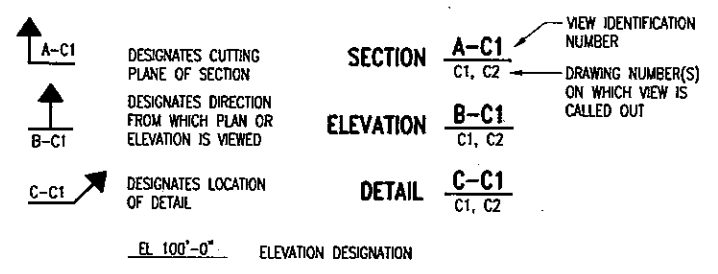
### ESTIMATE OF QUANTITIES

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>
1.0 WG STEEL RESERVOIR & FOUNDATION	1	EA
12" DUCTILE IRON PIPE	690	LF
24" DUCTILE IRON PIPE	400	LF
12" MLCP STL	14	LF
12" STL PIPE	36	LF
12" RCP PIPE	63	LF
12" GV & VB+C	6	EA
12" BUTTERFLY VALVE	2	EA
24" BUTTERFLY VALVE	3	EA
2" PVC CONDUIT	510	LF

1. ALL ABBREVIATIONS SHOWN ON THIS LEGEND  
MAY NOT APPEAR ON THIS SET OF DRAWINGS.

<b>NOT FOR CONSTRUCTION</b>	<b>GENERAL ABBREVIATIONS, GENERAL NOTES</b>	 <b>Stanley Consultants Inc.</b> 3920 SOUTH EASTERN AVENUE, SUITE 200 LAS VEGAS, NEVADA 89119 (702) 369-9396	PROJECT:  <b>GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1</b>	A. Stanley Group, Company 4400 West Sahara Avenue Suite 1000 Las Vegas, NV 89146 Worldeide	SCALE (H) N/A F.L.D. BK. # N/A	SCALE (V) N/A DATE: 1/18/06	DESIGN BY: BJH DRAFTED BY: ROB CHECKED BY:	REVISIONS	DATE
					<b>RHODES HOMES 2750-NORTH SITE</b>				

GENERAL  
VIEW MARKERS



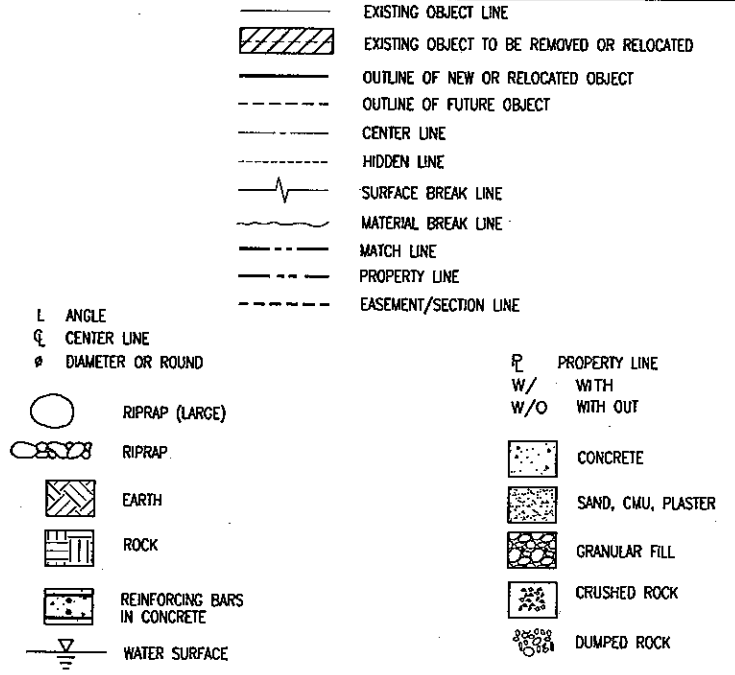
DIMENSIONS AND SCALE

DIMENSIONS AND/OR ELEVATIONS MARKED THUS (\*) ARE APPROXIMATE. OBTAIN FINAL DIMENSIONS FOR CONSTRUCTION FROM THE ENGINEER.  
DIMENSIONS AND/OR ELEVATIONS MARKED THUS (+) ARE ASSUMED AND MAY BE VARIED BY THE CONTRACTOR TO SUIT EQUIPMENT FURNISHED. FINAL DIMENSIONS ARE SUBJECT TO THE REVIEW OF THE ENGINEER.  
DIMENSIONS AND/OR ELEVATIONS MARKED THUS (+/-) MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.  
DIMENSIONS ARE GENERALLY TO SCALE, BUT SHOULD NOT BE SCALED. USE DIMENSIONS SHOWN. NTS (NOT TO SCALE) IS SHOWN ONLY WHERE DIMENSION IS OBVIOUSLY OUT OF SCALE.  
NUMERIC SCALE VALUES (1/4"=1'-0", ETC) APPLY ONLY AT FULL SIZE.

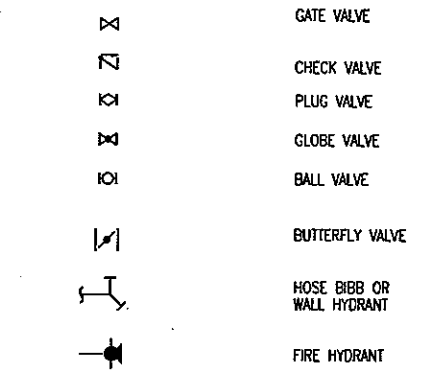
DRAWING AND PROCESS AREA DESIGNATION SYSTEM

DRAWINGS ARE SUBDIVIDED BY DISCIPLINE AS FOLLOWS:  
G GENERAL  
D DEMOLITION  
C CIVIL  
S STRUCTURAL  
A ARCHITECTURAL  
P PROCESS  
M MECHANICAL  
E ELECTRICAL  
I INSTRUMENTATION AND CONTROL

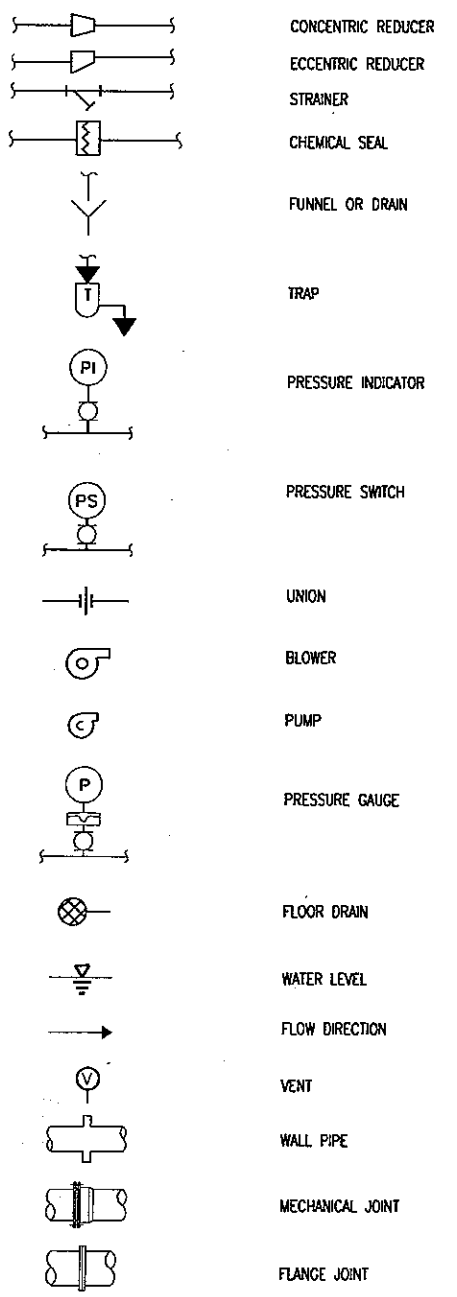
GENERAL SYMBOLS



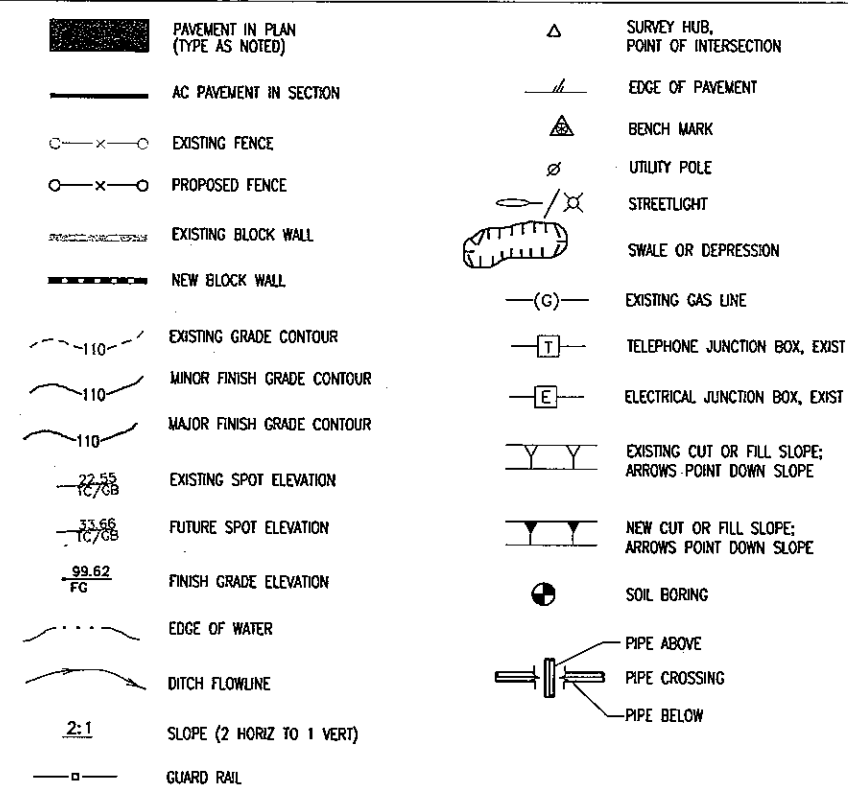
PIPING  
VALVE SYMBOLS



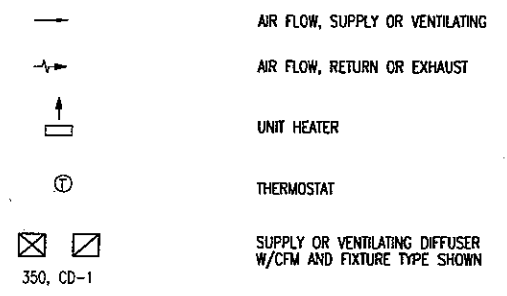
PIPE LINE DEVICES



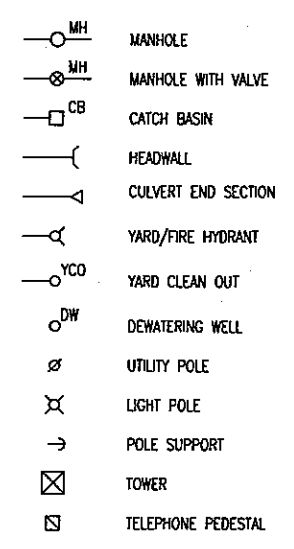
CIVIL



HVAC



UTILITY PLAN SYMBOLS



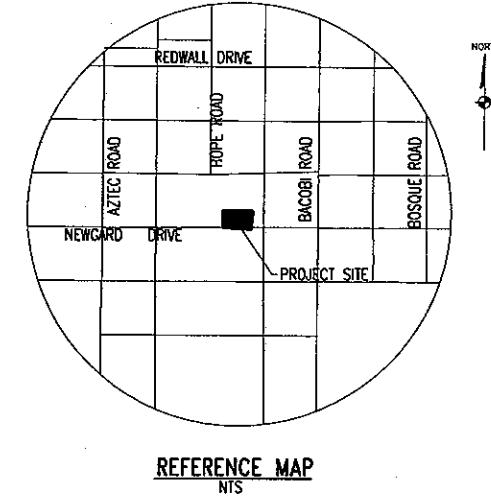
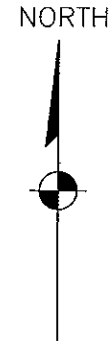
GENERAL NOTES

1. ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR ON THIS SET OF DRAWINGS.
2. FOR GENERAL LEGEND AND ABBREVIATIONS, SEE "G" DRAWINGS.

DATE		DESIGN BY: BHJ	SCALE (V)	N/A	SCALE (H)	N/A	DATE	1/18/06	PROJECT	GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1
REVISIONS		DRAWN BY: RDB	DATE	1/18/06	F.L.D. BK. #	N/A			PROJECT	
SHEET: 3										GENERAL, MECHANICAL, SITE PLAN LEGEND
DRAWING NO. G3										

NOT FOR CONSTRUCTION





**BENCHMARK**  
BENCHMARK # "SD 34" M.C.S.D.  
ELEVATION= 2590.24273 IFT (NAVD '88)

DESCRIPTION: ALUM CAP 2" DIA., SET IN CONC. 65 FT. NORTHEAST OF THE SOUTH  
1/4 CORNER OF SEC. 35, T. 21 N., R. 18 W. AND THE INTERSECTION OF SHINARUMP  
DR. AND HOPE RD., STAMPED "SD 34 1999 RLS 10343."

NORTH 00°13'38" EAST - THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 02, TOWNSHIP 20 NORTH, RANGE 18 WEST, GILA & SALT RIVER MERIDIAN MOHAVE COUNTY, ARIZONA, AS DETERMINED BY THE ARIZONA COORDINATE SYSTEM OF 1983 (AZ83-WF), WEST ZONE, INTERNATIONAL FOOT (IFT), UTILIZING FAST STATIC OBSERVATIONS PROCESSED BY NGS-OPUS.

M.C.S.D. "SD 32" = LATITUDE 35°09'22.70034"N,  
LONGITUDE 114°09'21.57240"W (NAD '83)  
HEIGHT 2562.46391ft (NAVD'88)

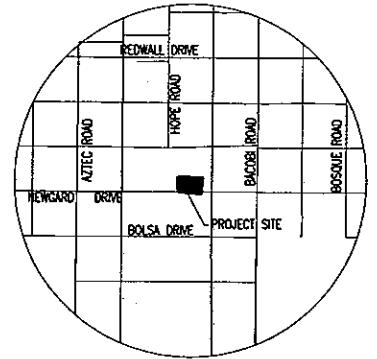
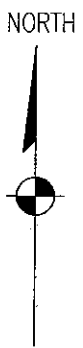
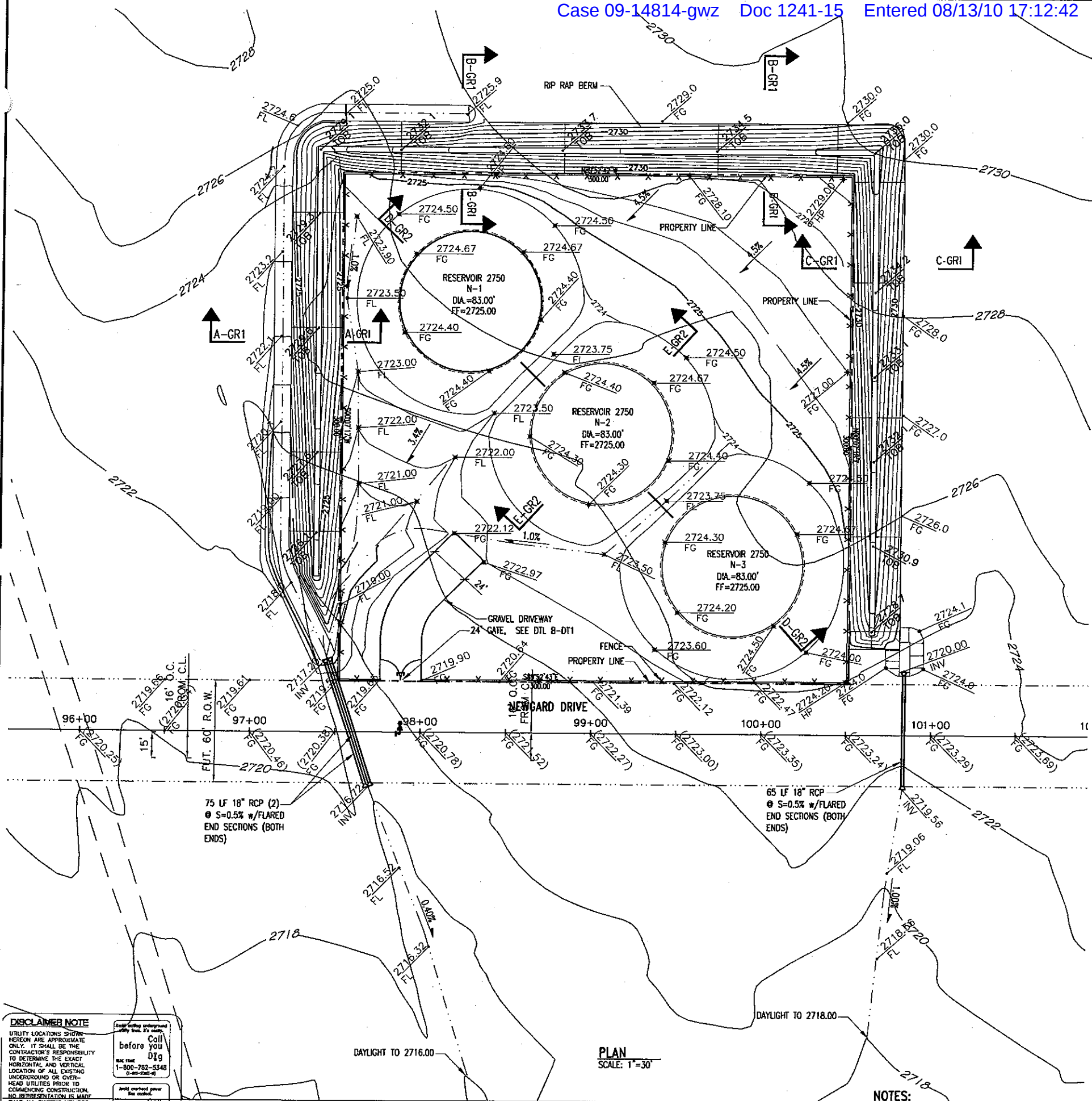
STONE 1/4 COR 3/2 = LATITUDE 35°08'55.53385"N,  
LONGITUDE 114°10'30.72281"W (NAD '83)  
HEIGHT 2498.204581ft (NAVD'88)

**PLAN**  
**SCALE: 1"=20'**

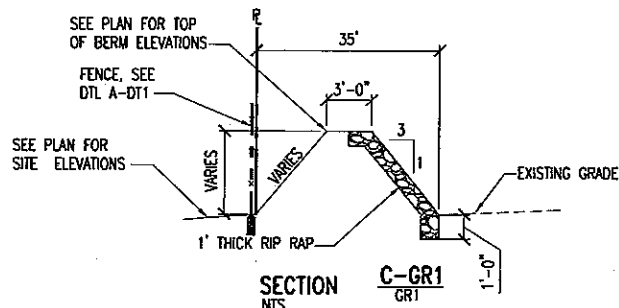
# OVERALL SITE AND SURVEY CONTROL PLAN

**NOT FOR  
CONSTRUCTION**

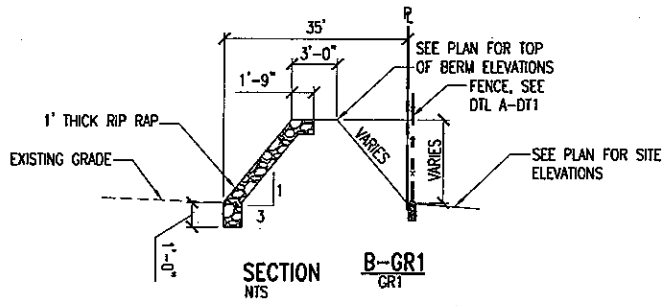
DRAWING NO. HC1	4 18
--------------------	---------



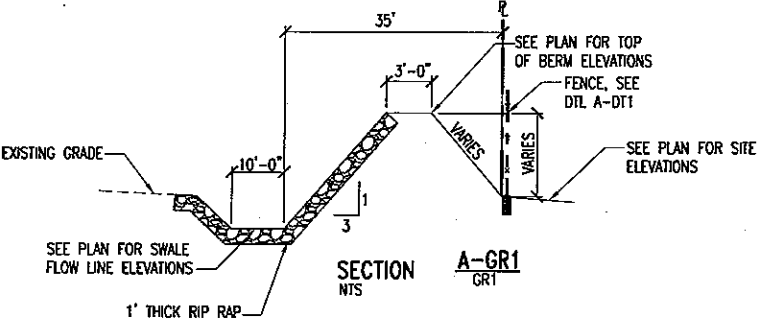
REFERENCE MAP  
NTS



SECTION C-GR1  
NTS



SECTION B-GR1  
NTS



SECTION A-GR1  
NTS

**BASIS OF BEARINGS**

NORTH 00°12'47" EAST - THE EAST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 27, TOWNSHIP 21 NORTH, RANGE 18 WEST, GILA & SALT RIVER MERIDIAN, MOHAVE COUNTY, ARIZONA, AS DETERMINED BY THE ARIZONA COORDINATE SYSTEM OF 1983 (AZ83-WF), WEST ZONE, INTERNATIONAL FOOT, UTILIZING FAST STATIC OBSERVATIONS PROCESSED BY NGS-OPUS.

M.C.S.D. "SD 32" = LATITUDE 35°09'22.70034"N,  
LONGITUDE 114°09'21.57240"W (NAD '83)  
HEIGHT 2562.46391ft (NAVD'88)

M.C.S.D. "SD 35" = LATITUDE 35°09'22.43032"N,  
LONGITUDE 114°10'58.56309"W (NAD '83)  
HEIGHT 2466.56824ft (NAVD'88)

SEC COR 26/35/34/27 = LATITUDE 35°10'15.19764"N,  
LONGITUDE 114°10'58.03545"W (NAD '83)  
HEIGHT 2505.65536ft (NAVD'88)

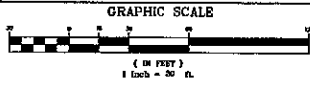
**BENCHMARK**

BENCHMARK # "AZT 5" M.C.S.D.  
ELEVATION= 2662.014ft (NAVD '88)

DESCRIPTION: 1 1/2" ALUMINUM CAP IN CONCRETE STAMP MOHAVE COUNTY 1999 "RLS 10343",  
LOCATED AT THE SOUTHWEST CORNER OF AZTEC ROAD & BOLSA DRIVE.

**DISCLAIMER NOTE**  
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.  
Call you Dig  
1-800-782-5348  
(1-800-782-5348)  
Call you Overhead  
1-828-753-5591  
(1-828-753-5591)

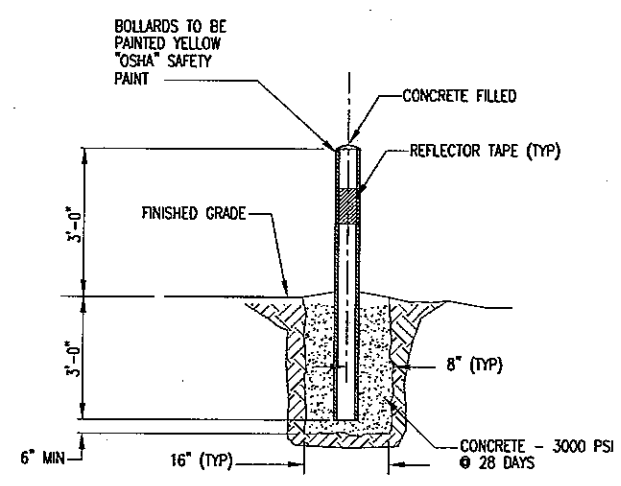
PLAN  
SCALE: 1"=30'



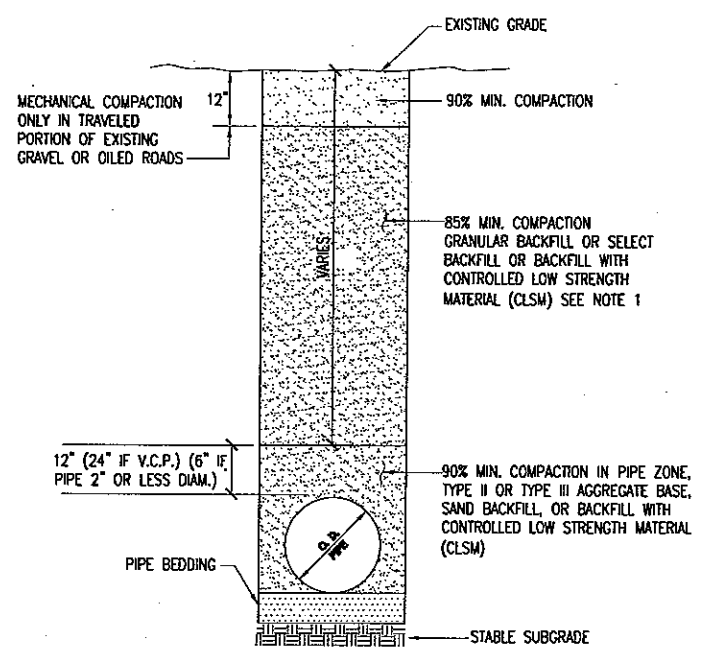
**NOTES:**

- 1. THE SOILS REPORT FOR GRADING PLAN COMPLETED BY: AMERICAN SOILS ENGINEERING, LLC.

DATE	
REVISIONS	
DESIGN BY: B.H.	
DRAWN BY: RDB	
CHECKED BY:	
SCALE (H) AS SHOWN	SCALE (V) N/A
F.L.D. BK. # N/A	DATE: 1/18/06
RHODES HOMES 2750-NORTH SITE	
GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1	
GRADING PLAN	
NOT FOR CONSTRUCTION	
DRAWING NO.	5
GR1	18



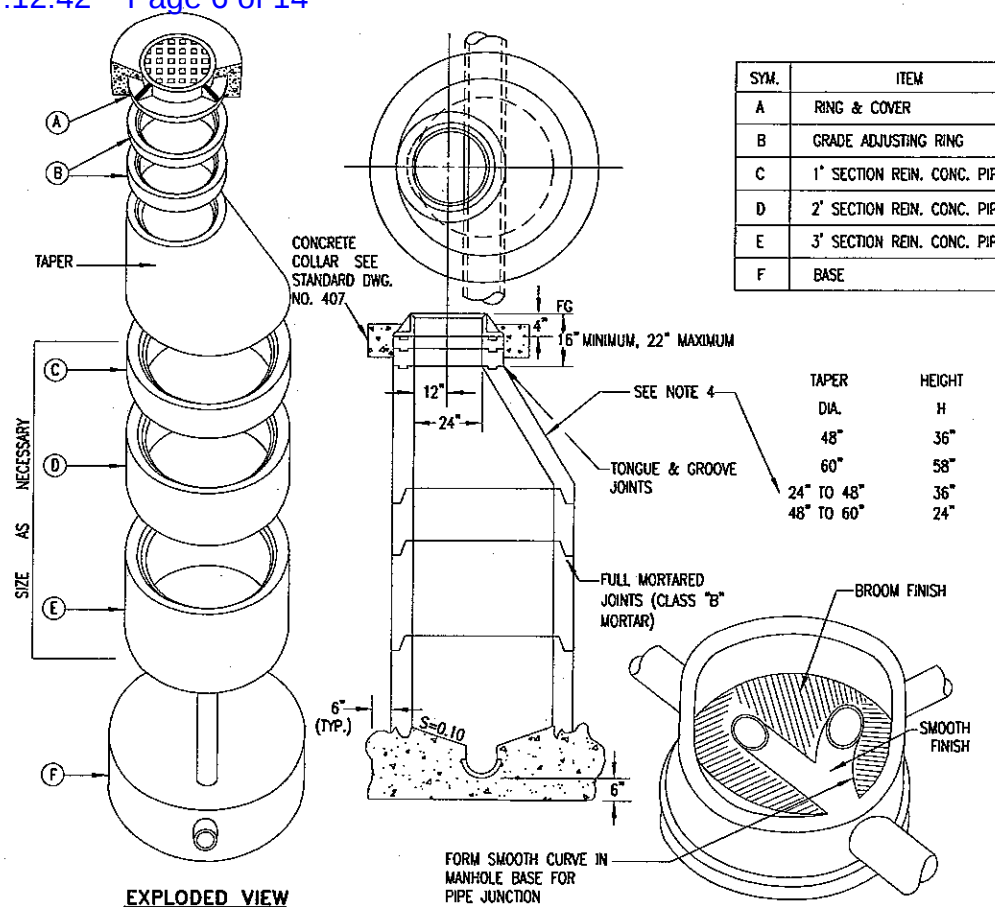
BOLLARD DETAIL  
NTS  
F-GR2  
UT4



TRENCH BACKFILL-UNPAVED AREAS  
NTS

PIPE TRENCH NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE AGENCY REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY AND ENGINEER.



EXPLODED VIEW

ISOMETRIC VIEW

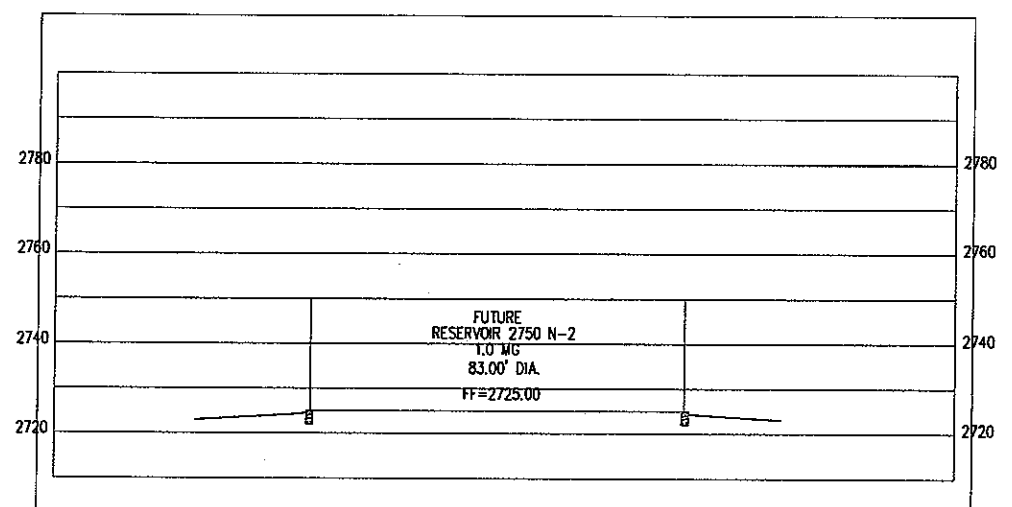
NOTE:  
TAPER AND CONE SECTION WILL NOT BE USED  
ON OVERFLOW STRUCTURE

MANHOLES NOTES

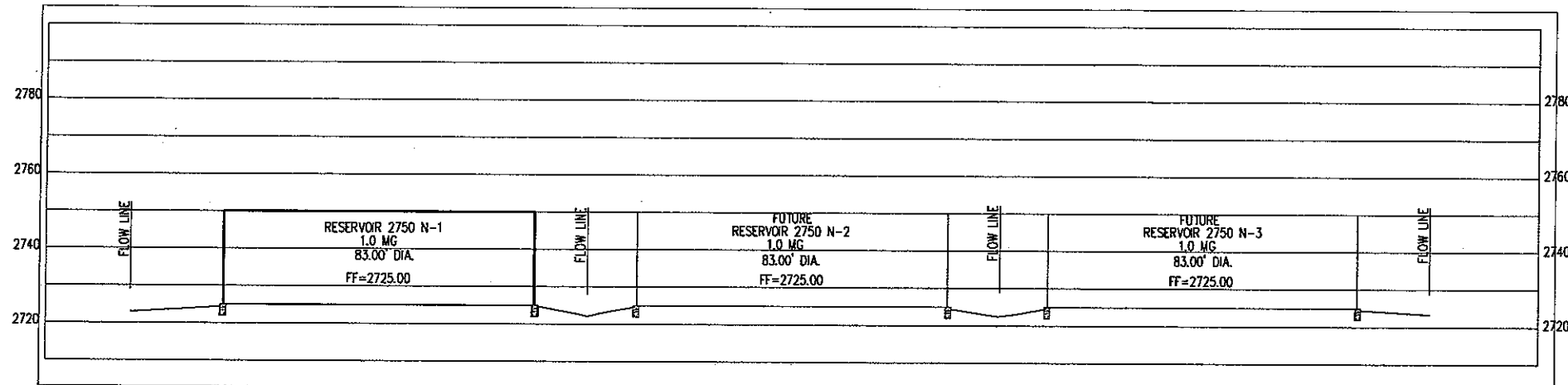
1. MANHOLE MATERIALS OF CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 03401, "PRECAST MANHOLES" OF THE "STANDARD SPECIFICATIONS".
2. REINFORCING STEEL SHALL BE AS SHOWN, WIRED TIGHTLY AT ALL INTERSECTIONS AND EMBEDDED AT LEAST ONE (1) INCH CLEAR UNLESS OTHERWISE NOTED.
3. EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE, IF SOIL CONDITIONS REQUIRE), IN EXISTING STREET SECTIONS, ALLEY SECTIONS AND CONFINED AREAS SUCH AS LIMITED EASEMENTS OR ADJACENT TO STRUCTURES. NATURAL ANGLE OF REPOSE WILL ALLOW IN ALL OTHER AREAS.
4. PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478.
5. DISTANCE BETWEEN THE TOP OF MANHOLE AND FIRST STEP SHALL BE A MAXIMUM OF SIXTEEN (16) INCHES.
6. AN OPTIONAL TWO PIECE 24" TO 48" AND 48" TO 60" CONE MAY BE USED.

TYPE I MANHOLE  
NTS

G-GR2  
UT4



SECTION  
NTS  
E-GR2  
GRT



SECTION  
HORIZ: 1"=20'  
VERT: 1"=20'  
D-GR2  
GRT

**DISCLAIMER NOTE**  
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES LOCATION.  
Call before you dig  
1-800-782-5348  
Call before you Overhead  
1-928-753-5591

SYM.	ITEM
A	RING & COVER
B	GRADE ADJUSTING RING
C	1' SECTION REIN. CONC. PIPE
D	2' SECTION REIN. CONC. PIPE
E	3' SECTION REIN. CONC. PIPE
F	BASE

DATE	REVISIONS	DESIGN BY: BAH	SCALE (H) AS SHOWN	SCALE (V) N/A	DATE: 1/18/06	CHECKED BY:
		DRAFTED BY: ROB				

**GRADING SECTIONS AND DETAILS**

**NOT FOR CONSTRUCTION**

**PROJECT:** GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1

**SHEET:** 6

**DRAWING NO.:** GR2

**18**





NORTH 00°12'47" EAST - THE EAST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 27, TOWNSHIP 21 NORTH, RANGE 18 WEST, GILA & SALT RIVER MERIDIAN, MOHAVE COUNTY, ARIZONA, AS DETERMINED BY THE ARIZONA COORDINATE SYSTEM OF 1983 (AZ83-WF), WEST ZONE, INTERNATIONAL FOOT, UTILIZING FAST STATIC OBSERVATIONS PROCESSED BY NGS-OPUS.

## BENCHMARK

DESCRIPTION: 1 1/2" ALUMINUM CAP IN CONCRETE STAMP MOHAVE COUNTY 1999 "RLS 10343",  
LOCATED AT THE SOUTHWEST CORNER OF AZTEC ROAD & BOLSA DRIVE.

30 0 15 30 60

( IN FEET )  
1 inch = 30 ft.

1. ALL DUCTILE PIPE JOINTS AND CONNECTIONS TO BE RESTRAINED.

Avoid calling underground utility lines. It's costly.  
 Call before you Dig  
 1-800-782-5348  
 (1-800-FIND-6)

Avoid overhead power line contact.  
 Call before you Overhead  
 1-928-753-5591  
 UNPOWER

Avoid overhead power  
 line contact.  
 Call  
 before you  
 Overhead

NOT FOR  
CONSTRUCTION

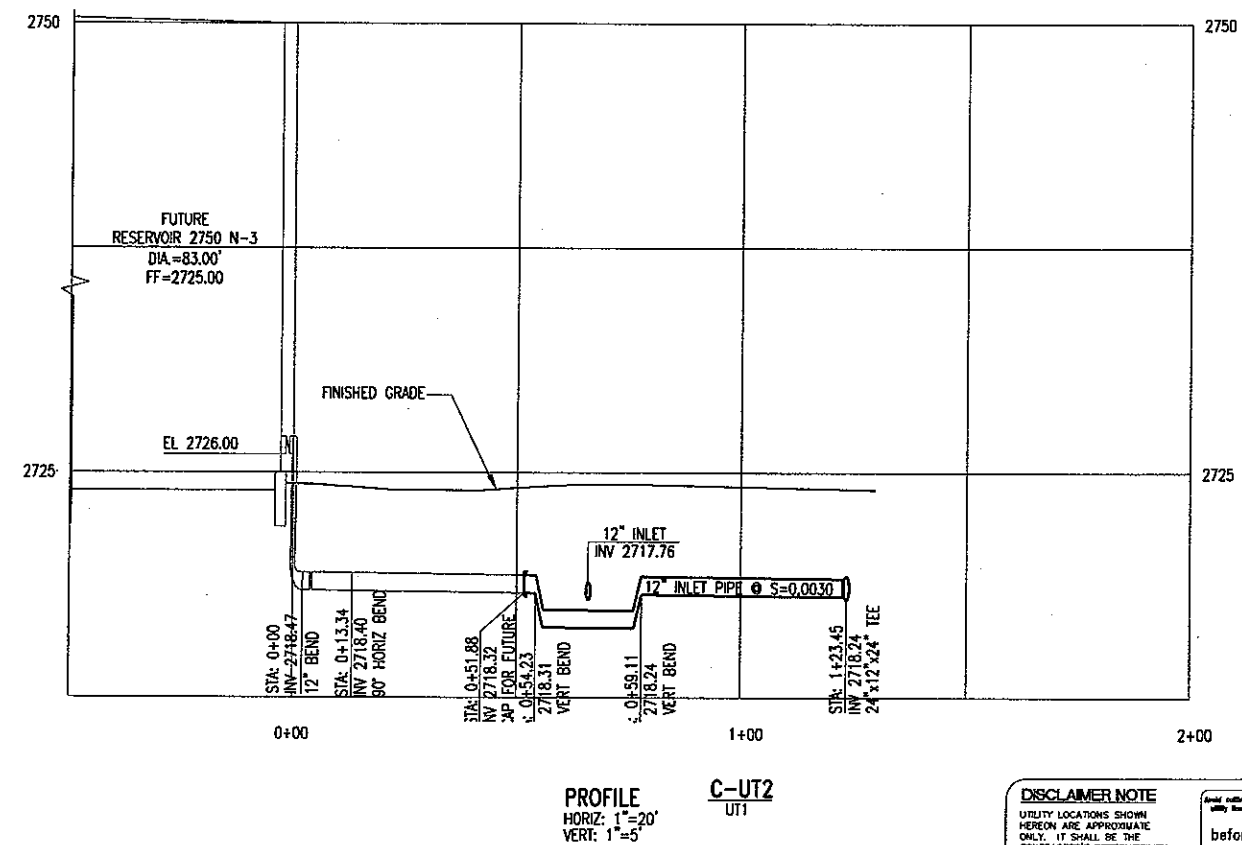
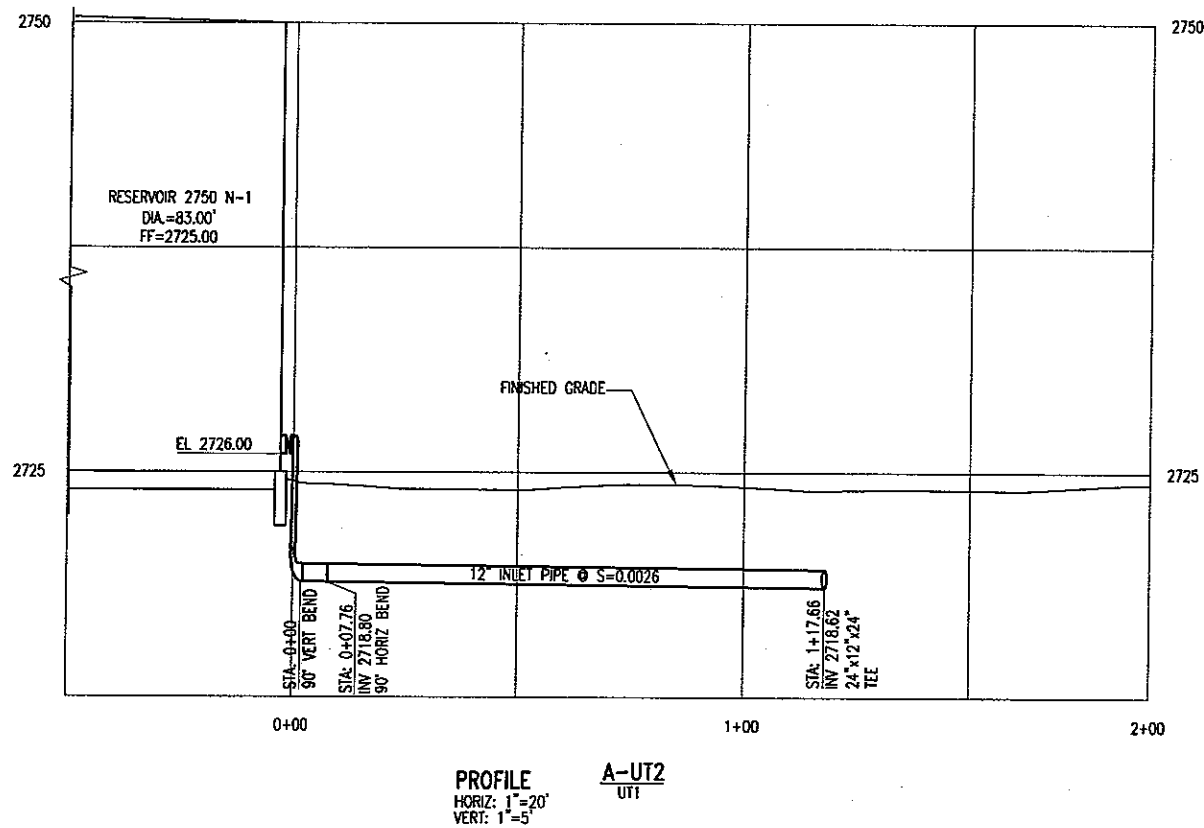
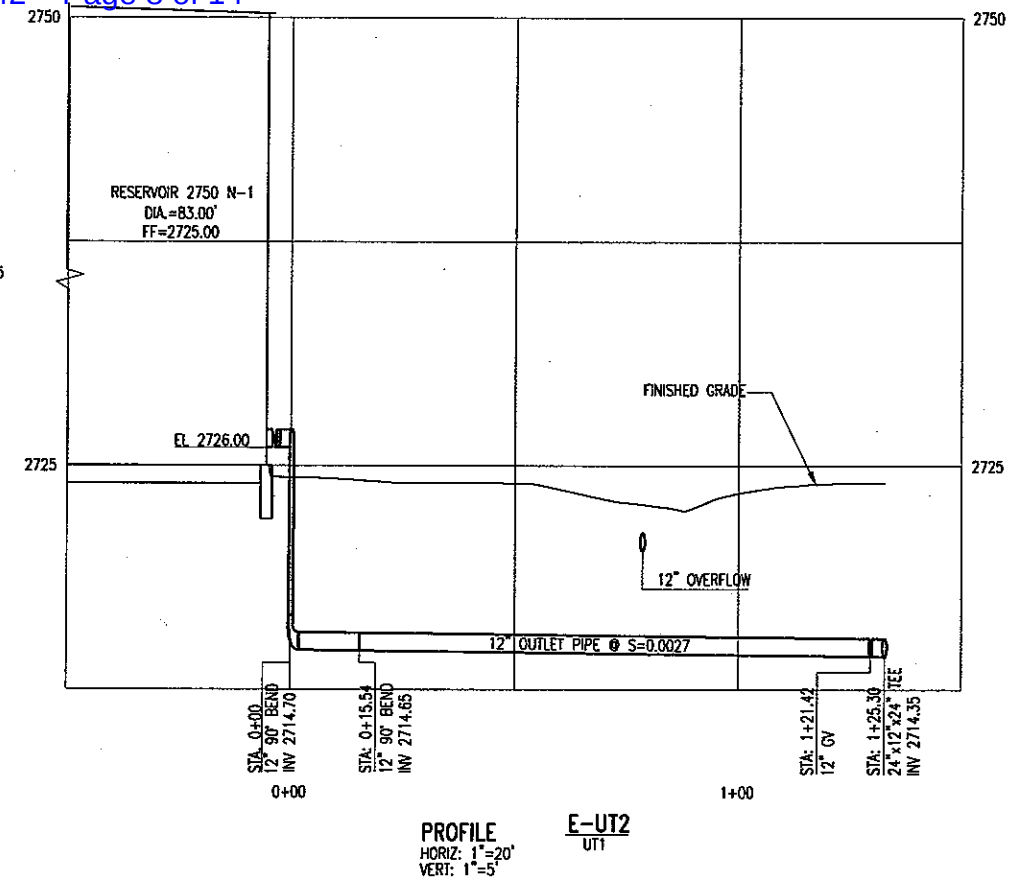
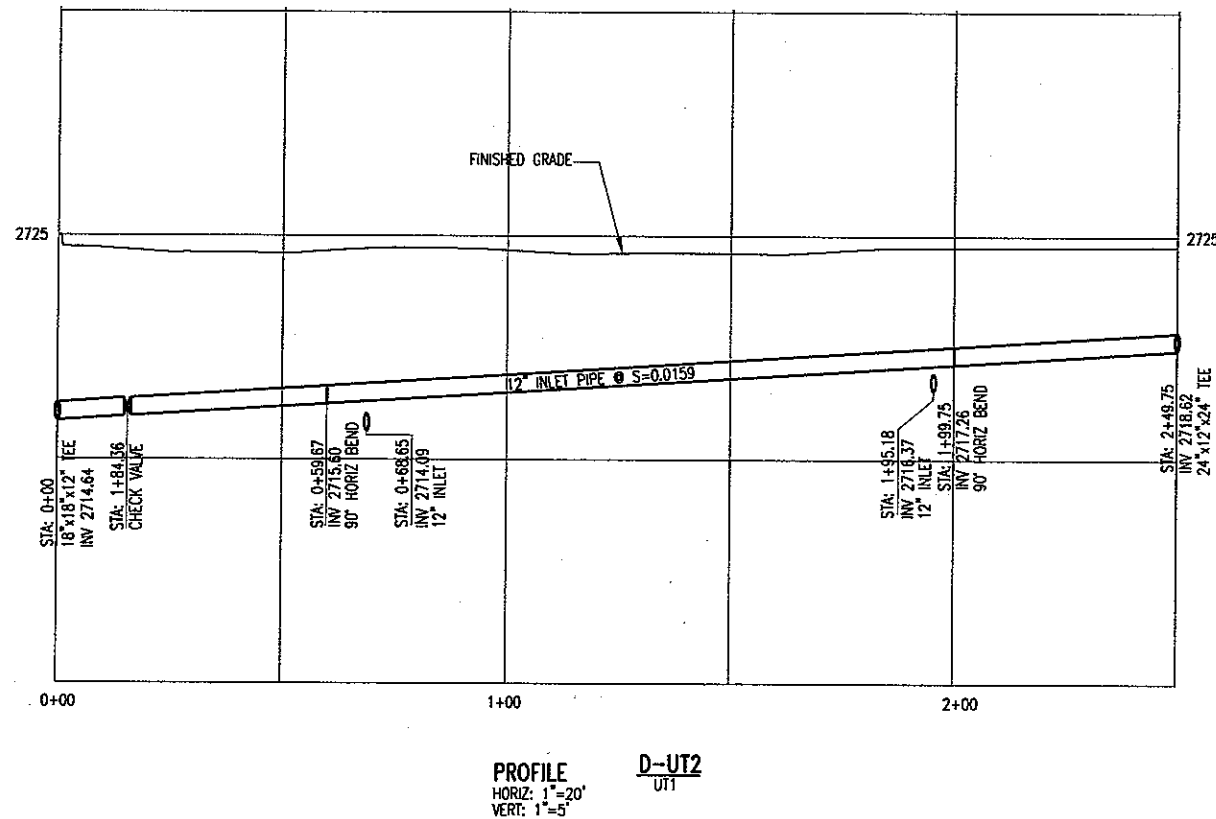
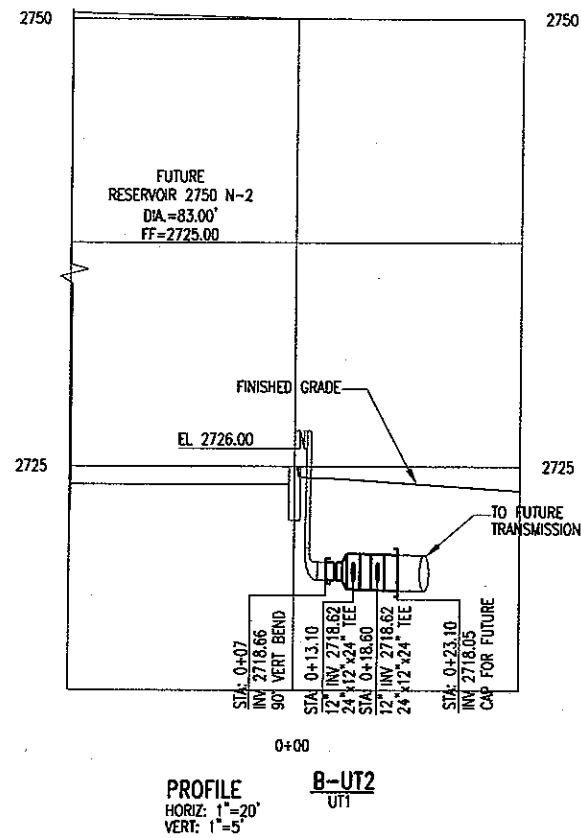
DRAWING NO. UT1	7 18
--------------------	---------

**Golden Valley Ranch  
Potable Water  
Reservoir 2750 N-1**

## YARD PIPING PLAN

SHEET:

DRAWING NO. UT1	7 18
--------------------	---------



**DISCLAIMER NOTE**  
UTILITY LOCATIONS SHOWN  
HEREON ARE APPROXIMATE  
ONLY. IT SHALL BE THE  
CONTRACTOR'S RESPONSIBILITY  
TO DETERMINE THE EXACT  
HORIZONTAL AND VERTICAL  
LOCATION OF ALL EXISTING  
UNDERGROUND AND OVER-  
HEAD UTILITIES PRIOR TO  
COMMENCING CONSTRUCTION.  
NO REPRESENTATION IS MADE  
THAT ALL EXISTING UTILITIES  
ARE SHOWN HEREON. THE  
ENGINEER ASSUMES NO  
RESPONSIBILITY FOR UTILITIES  
NOT SHOWN OR UTILITIES  
NOT SHOWN IN THEIR PROPER  
LOCATION.

**Avoid calling underground utility lines. It's costly.**  
before **Call you Dig**  
FREE TOLL  
1-800-782-5348  
(1-800-782-61)

**Avoid unwanted power line service.**  
before **Call you Overhead**  
1-928-753-5591

**NOT FOR  
CONSTRUCTION**

DRAWING NO. UT2	8 18
--------------------	---------

**Stanley Consultants INC.**  
5820 SOUTH EASTERN AVENUE, SUITE 200  
LAS VEGAS, NEVADA 89119 (702) 369-9396

**GOLDEN VALLEY RANCH  
POTABLE WATER  
RESERVOIR 2750 N-1**

**PROJECT:**

## YARD PIPING PROFILES

SCALE (H) AS SHOWN	SCALE (V) N/A	DESIGN BY: R/H
F.L.D. BK. # N/A	DATE: 1/18/06	DRAFTED BY: R/B
		CHECKED BY:

# RHODES HOMES

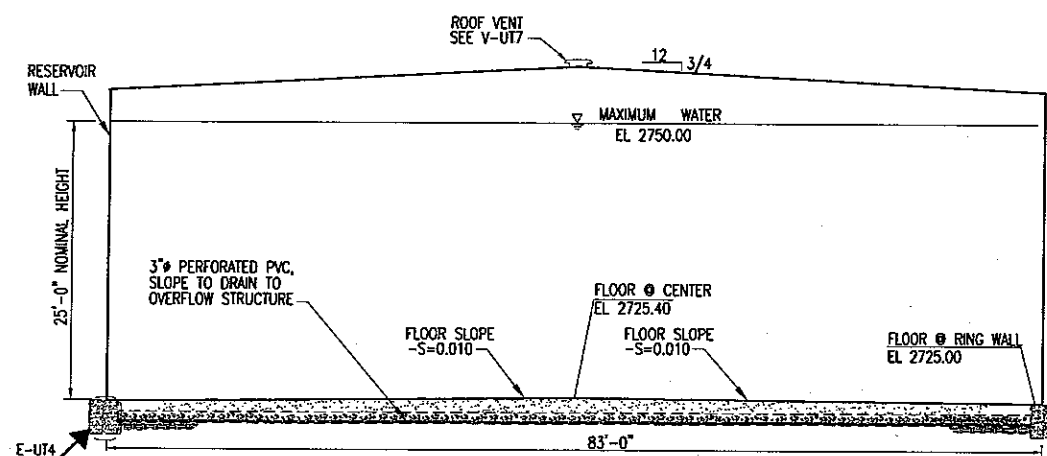
## 2750-NORTH SITE

[illegible]

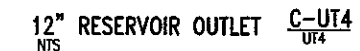
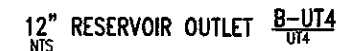


**DISCLAIMER NOTE**


UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE DEPTH, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO LIABILITY OR RESPONSIBILITY FOR UTILITIES NOT SHOWN BY THEIR PROPER LOCATION.

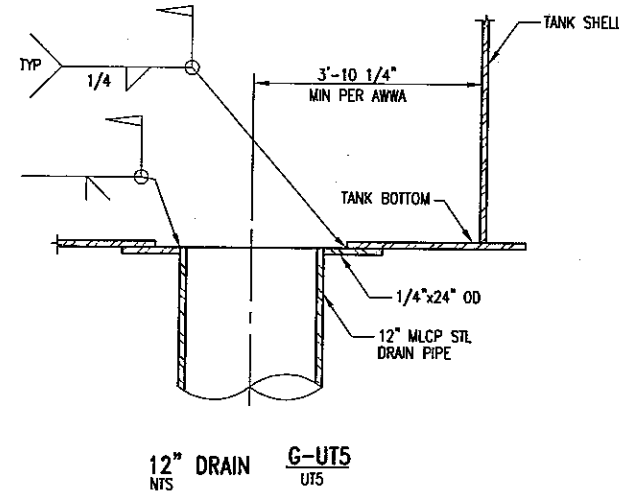


SECTION A-UT4  
1/8"=1'-0" UT4

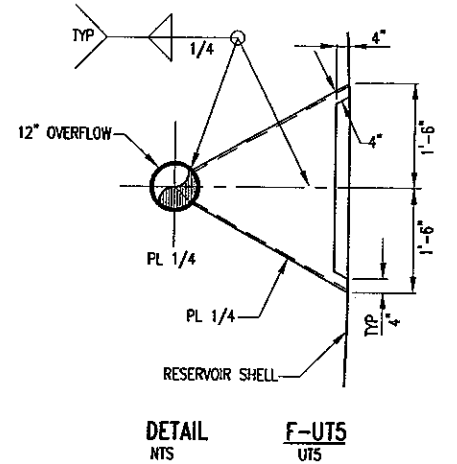


NOTE:  
LOCATE AND SIZE TANK ANCHORS IN  
ACCORDANCE WITH THE MANUFACTURERS  
RECOMMENDATIONS

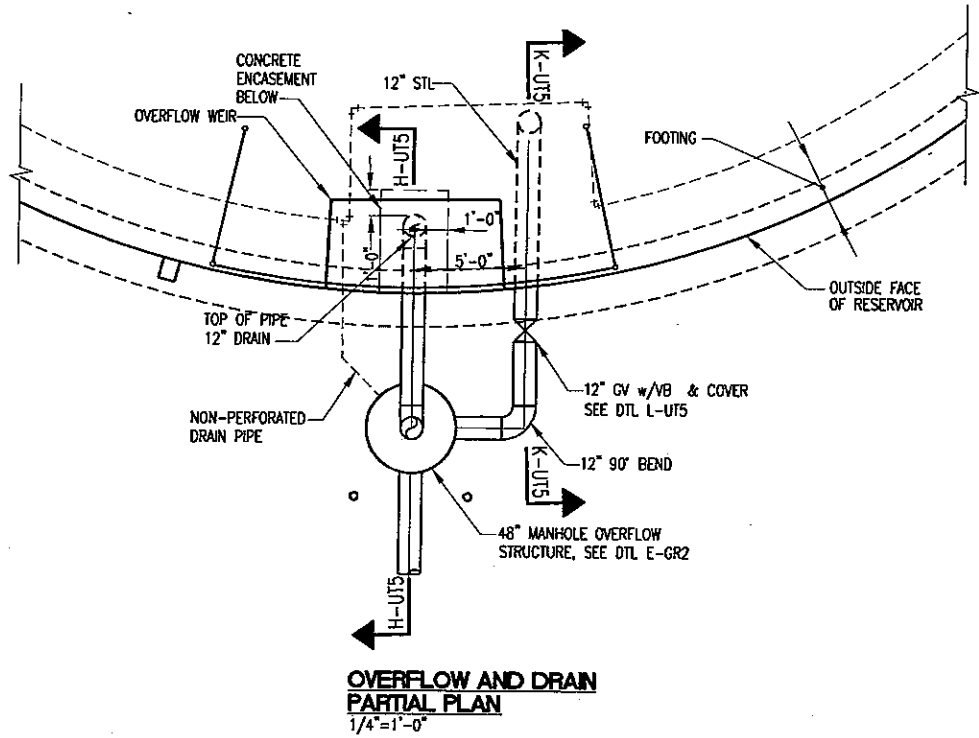
<div>NOT FOR CONSTRUCTION</div>		<div>RESERVOIR PLAN AND SECTIONS</div>	<div><div></div><div>PROJECT: GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1</div></div>	<div>Stanley Consultants Inc. 3820 SOUTH EASTERN AVENUE, SUITE 200 LAS VEGAS, NEVADA 89119 (702) 369-9398</div>	<div>A Stanley Group Company Engineering, Environmental and Construction Services Worldwide</div>	SCALE (H) AS SHOWN		SCALE (V) AS SHOWN	DESIGN BY: BAH	REVISIONS		DATE	
						FLD. BK. # N/A		DATE: 1/18/06	DRAFTED BY: ROB	CHECKED BY:		RHODES HOMES 2750-NORTH SITE	
SHEET:													
DRAWING NO. UT4		10	18										



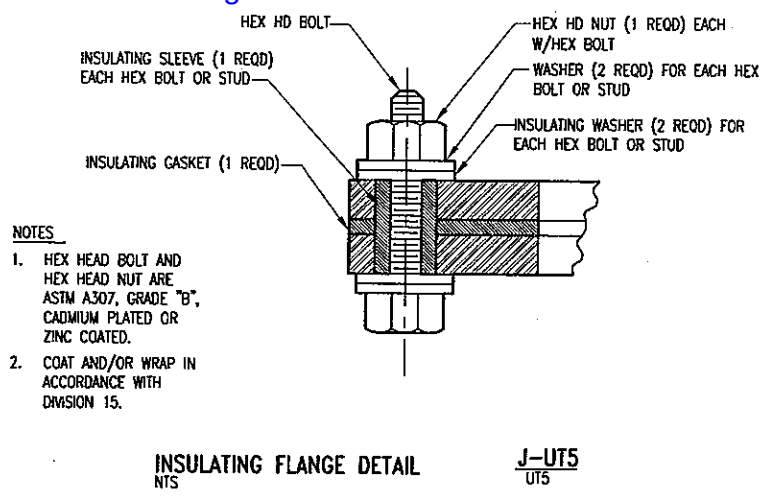
12" DRAIN  
NTS  
G-UT5  
UT5



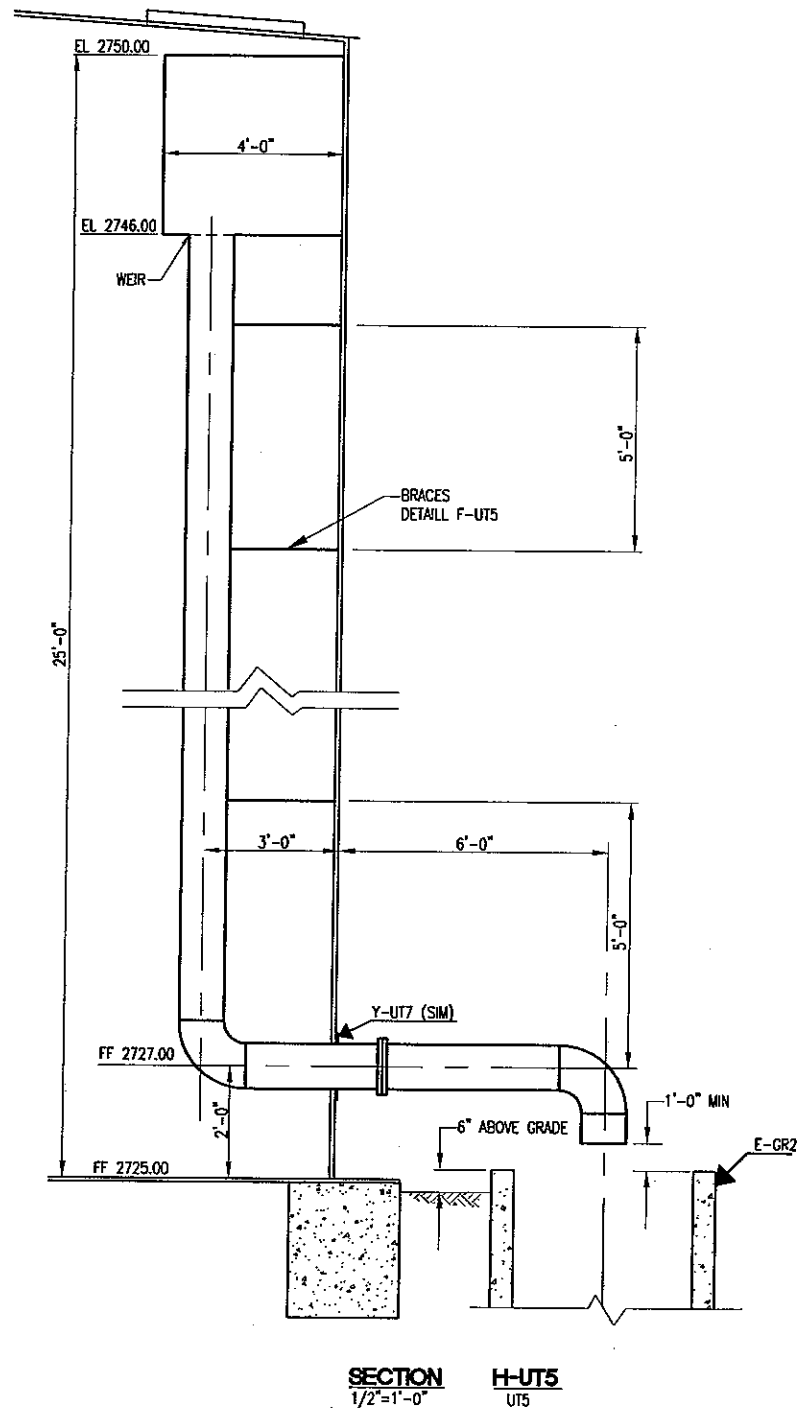
DETAIL  
NTS  
F-UT5  
UT5



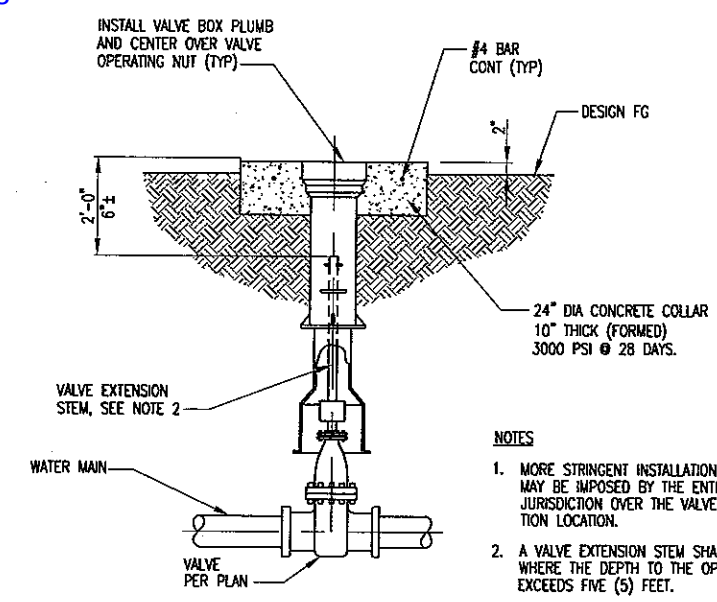
OVERFLOW AND DRAIN  
PARTIAL PLAN  
1/4"=1'-0"



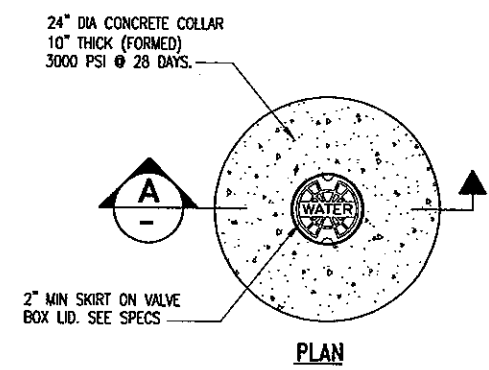
INSULATING FLANGE DETAIL  
NTS  
J-UT5  
UT5



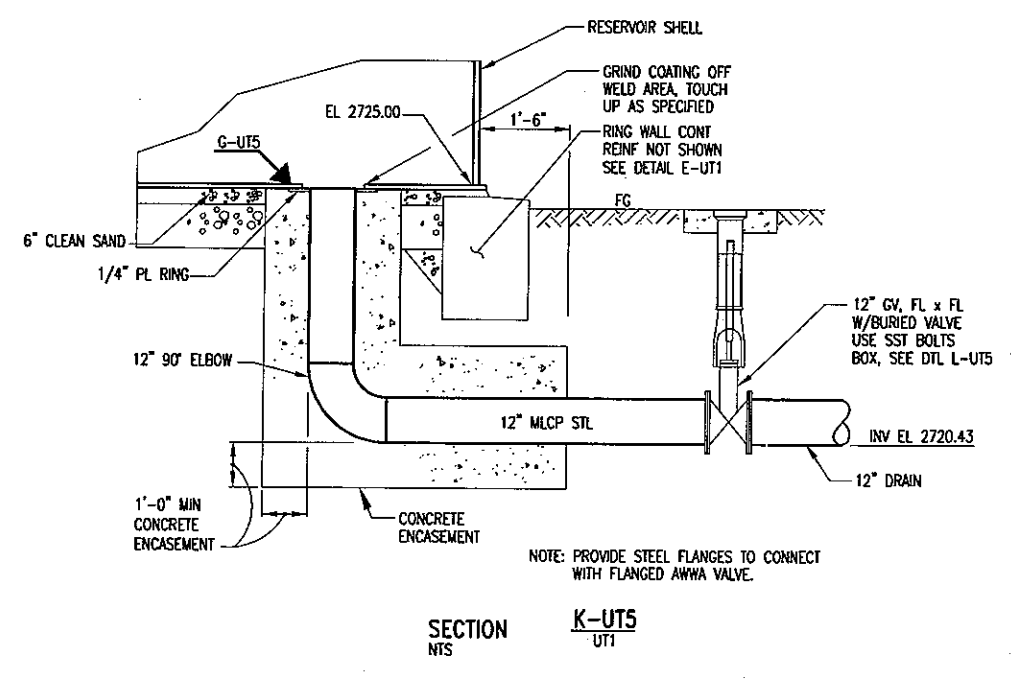
SECTION  
1/2"=1'-0"  
H-UT5  
UT5



SECTION "A"



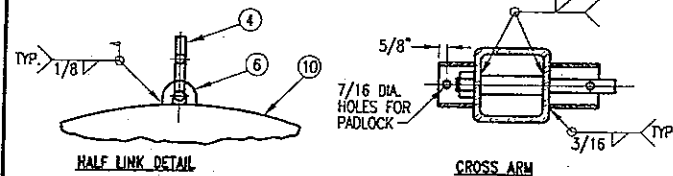
VALVE BOX INSTALLATION  
NTS  
L-UT5  
UT1, UT5



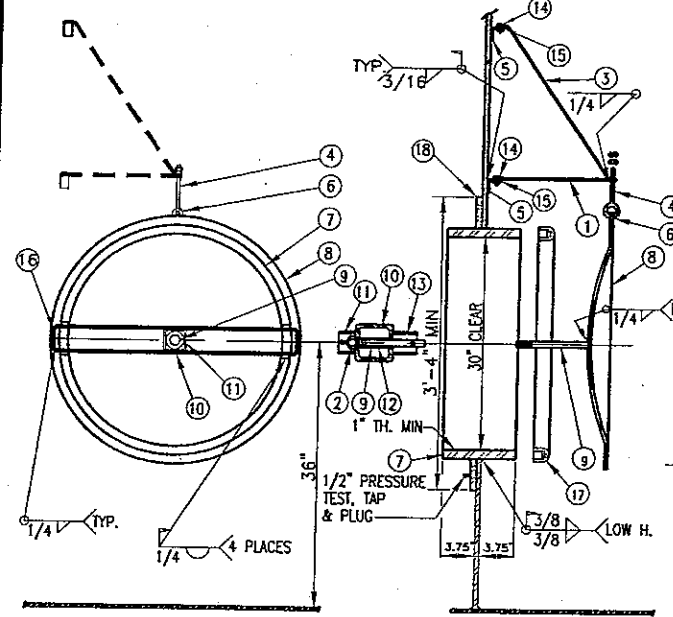
SECTION  
NTS  
K-UT5  
UT1

DATE	
REVISIONS	
DESIGN BY: BAH	AS SHOWN
DRAFTED BY: ROB	DATE: 1/18/06
CHECKED BY:	
SCALE (H)	SCALE (V)
F.D. BK. # N/A	
Stanley Consultants Inc. 3820 SOUTH EASTERN AVENUE, SUITE 200 LAS VEGAS, NEVADA 89119 (702) 369-9398	PROJECT: GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1
RESERVOIR SECTIONS AND DETAILS	
NOT FOR CONSTRUCTION	
DRAWING NO. UT5	11 18





ITEM	DESCRIPTION	SPECIFICATION
1	DAVIT ARM	SS304
2	HEAVY HEX NUT AND WASHER	S8882
3	DAVIT ARM SUPPORT	SS304
4	COVER PLATE SUPPORT	SS18-8
5	TANK MOUNT CUP	A36
6	WELD NUTS	SS18-8
7	30" I.D. MANWAY PENETRATION RING	AS16-70
8	DISHD & FLARED COVER PLATE (5/8")	A285
9	CLOSURE BOLT	SS18-8
10	MANWAY CROSS ARM	A500
11	WINDAL-PROOFING TUBE	A36
12	CROSS ARM SLEEVE	SS304
13	WINDAL-PROOFING TUBE	A36
14	1/2" BOLT	SS304
15	INSULATION KIT	NYLON
16	CROSS ARM END	A36
17	C RING GASKET	NEOPRENE
18	PLATE 1/4" x 40" QD. SHOP TRACE ID. (ITEM 7 QD)	



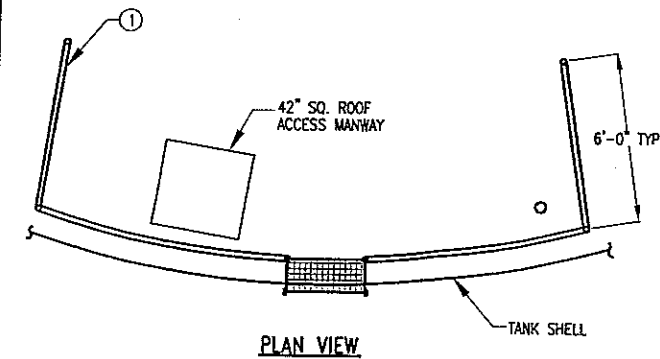
- NOTES:
1. THE ACCESS MANWAY SHALL SHOW NO VISIBLE SIGN OF LEAKAGE. DETAILS SHOWN ARE MINIMUM ACCEPTABLE SIZES.
  2. ALL MISC. HARDWARE AND BOLTS SHALL BE TYPE 316 SST.
  3. PRESSURE TEST ACCESS MANWAY TO 30 PSI PRIOR TO INSTALLATION. SUBMIT LEAK TEST FOR REVIEW.
  4. SUBMIT DETAILS FOR REVIEW PRIOR TO FABRICATION.

INWARD SHELL MANWAY - 30"Ø

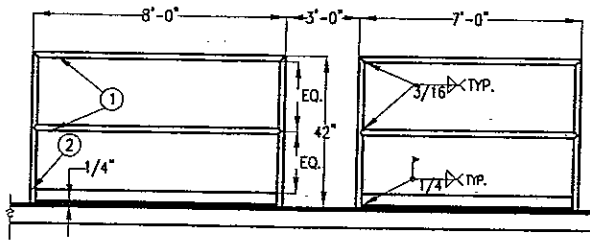
DAVIT SUPPORT AND DAVIT ARM DETAILS

N-UT6

ITEM	QTY.	DESCRIPTION
1		NOM. 1 1/4" (1.66" O.D.) SCH. 40 STL. PIPE
2		FLAT BAR 1/4" x 4"



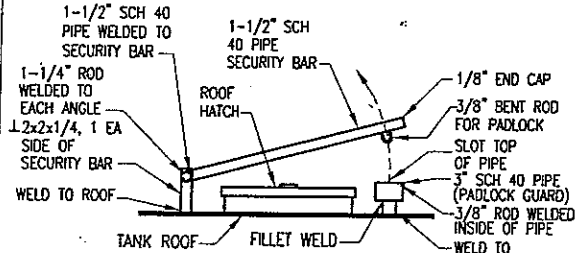
PLAN VIEW



ELEVATION

ROOF GUARDRAIL ASSEMBLY

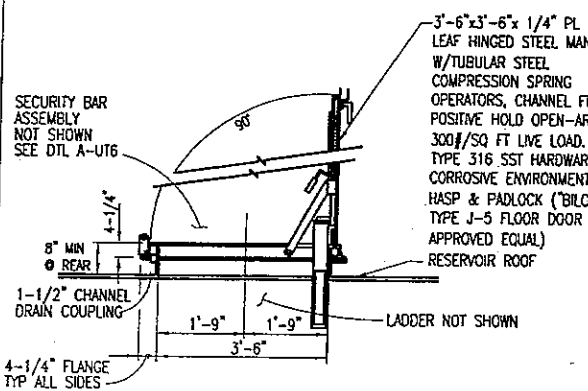
M-UT6



- NOTES:
1. SECURITY BAR SHALL SWING FREELY AND PREVENT OPENING OF HATCH WHEN LOCKED.
  2. WELDS AND WELD REQUIREMENTS NOT SHOWN. ALL JOINTS SHALL BE CONTINUOUS FILLET WELDS OR COMPLETE JOINT PENETRATION GROOVE WELDS.
  3. FABRICATE SECURITY BAR ASSEMBLY IN ACCORDANCE WITH CITY OF HENDERSON STANDARDS. SUBMIT DETAILS FOR REVIEW PRIOR TO FABRICATION.

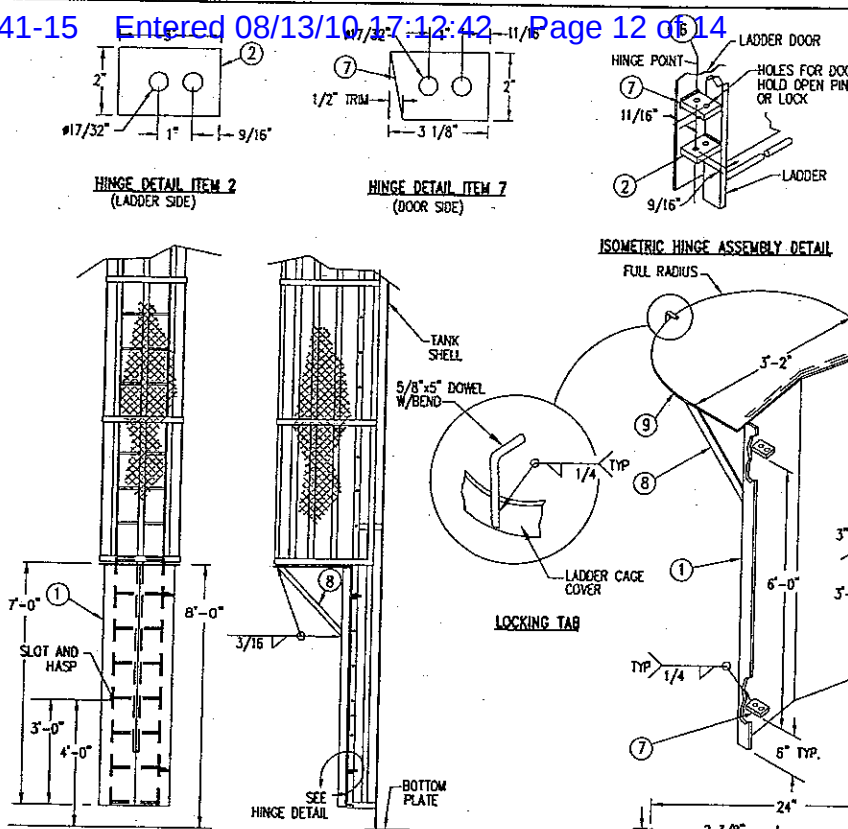
SECURITY BAR ASSEMBLY

A-UT6



ROOF HATCH ASSEMBLY

P-UT6



TYPICAL INSTALLATION DETAILS

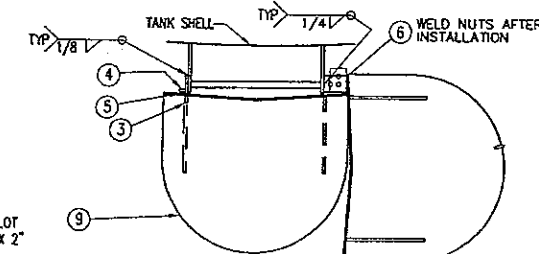
LADDER & CAGE SHOWN FOR POSITIONING CLARITY

DOOR COVER FOR ACCESS LADDER

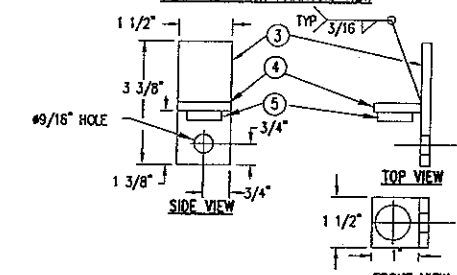
R-UT6

ITEM	DESCRIPTION	SPECIFICATION
1	PLATE 3/16" x 26 15/32" x 7'-0" LG. FORM AS SHOWN	A36
2	FLAT BAR 3/8" x 2" x 3' LG. DRILL AS SHOWN	A36
3	FLAT BAR 3/16" x 1 1/2" x 3 3/8" LG.	A36
4	FLAT BAR 3/16" x 1 1/2" x 1' LG.	A36
5	NEOPRENE PLUG, 3/4" DIA. WITH GLUE	NEOPRENE
6	BOLT AND NUT, 1/2" x 1 1/2" LG.	A36
7	FLAT BAR 3/8" x 2" x 3 1/8" LG. CUT AND DRILL AS SHOWN	A36
8	FLAT BAR 3/8" x 2" x 21 1/8" LG. CUT AT 45°	A36
9	PLATE 3/8" x 34 1/2" x 38"	A36

HOT DIP GALVANIZE LADDER DOOR AFTER FABRICATION

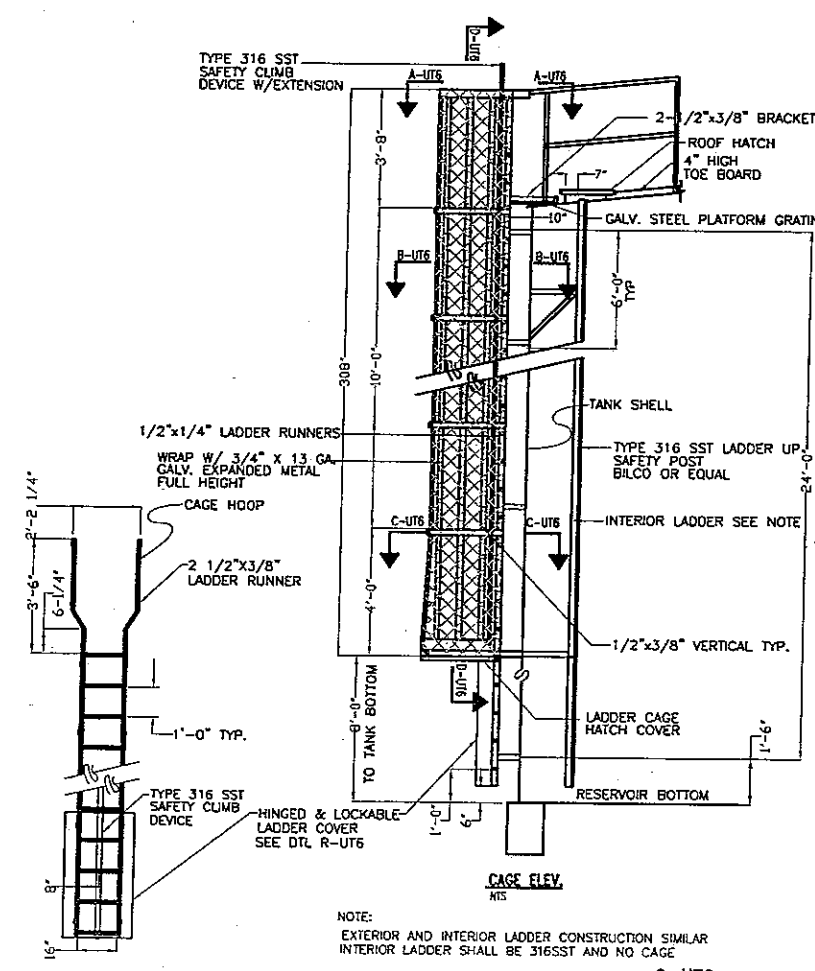


PLAN VIEW WITH PHANTOM VIEW



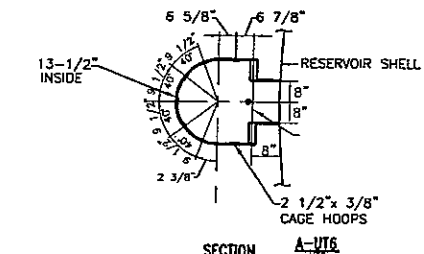
HASP ASSEMBLY DETAILS

- NOTES:
1. CAGE HATCH COVER SHALL OPEN TO THE SIDE TO ALLOW ACCESS TO LADDER.
  2. WELDS AND WELD REQUIREMENTS NOT SHOWN. ALL JOINTS SHALL BE CONTINUOUS FILLET WELDS OR COMPLETE JOINT PENETRATION GROOVE WELDS.
  3. FABRICATE CAGE HATCH COVER IN ACCORDANCE WITH CITY OF HENDERSON STANDARDS. SUBMIT DETAILS FOR REVIEW PRIOR TO CONSTRUCTION.

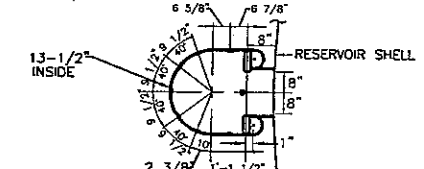


EXTERIOR CAGED LADDER

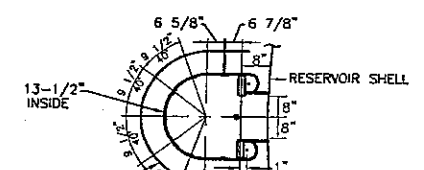
Q-UT6



SECTION A-UT6



SECTION B-UT6



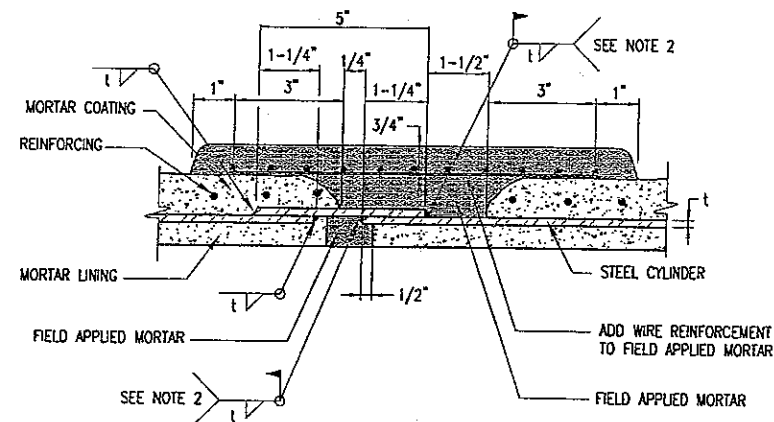
SECTION C-UT6

GOLDEN VALLEY RANCH  
POTABLE WATER  
RESERVOIR 2750 N-1

RESERVOIR DETAILS

NOT FOR CONSTRUCTION

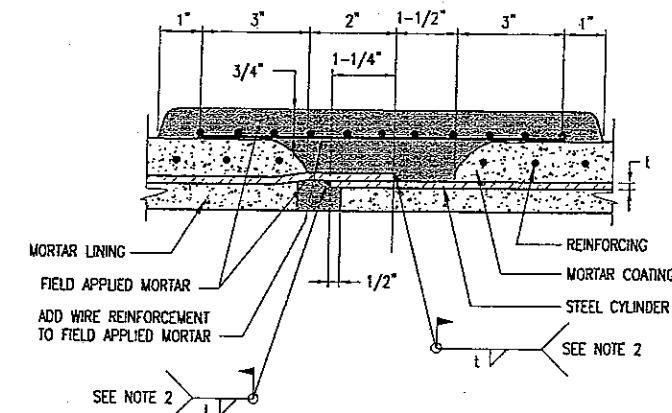
DRAWING NO. 12  
UT6



## NOTES

1. SEE SPECS SEC 02650 FOR MORTAR LINED AND COATED STEEL PIPE
2. WELD OUTSIDE ON PIPE SMALLER THAN 36", OPTIONAL INSIDE OR OUTSIDE ON PIPE GREATER THAN OR EQUAL TO 36"

**LAP WELDED JOINT  
FOR MLCP STEEL PIPE**  
NTS



## NOTES

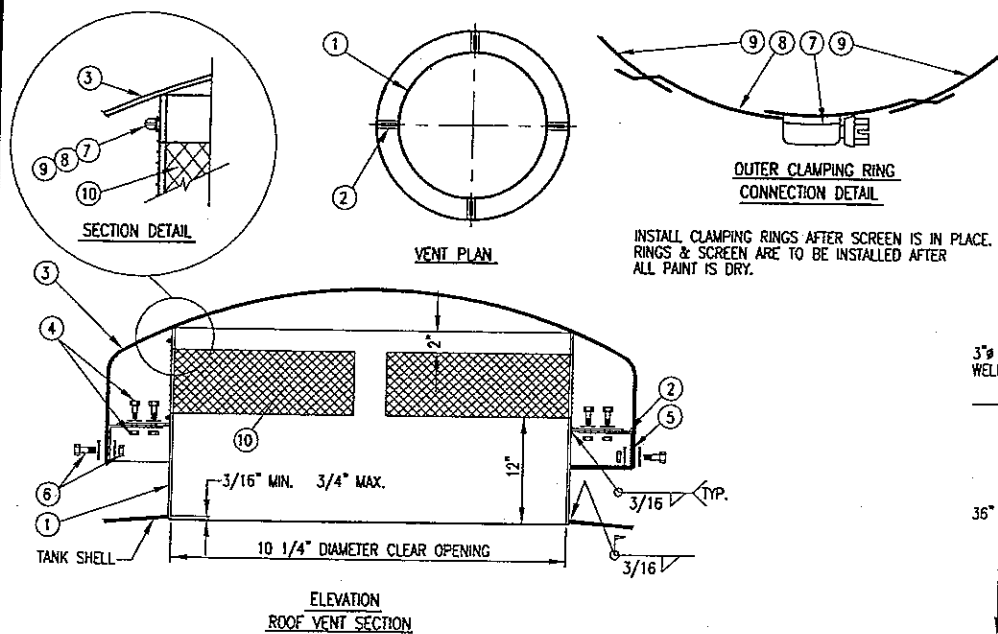
1. SEE SPECS SEC 02650 FOR MORTAR LINED AND COATED STEEL PIPE
2. WELD OUTSIDE ON PIPE SMALLER THAN 36", OPTIONAL INSIDE OR OUTSIDE ON PIPE GREATER THAN OR EQUAL TO 36"

**LAP WELDED JOINT  
FOR MLCP STEEL PIPE-ALTERNATE**  
NTS

## BILL OF MATERIALS

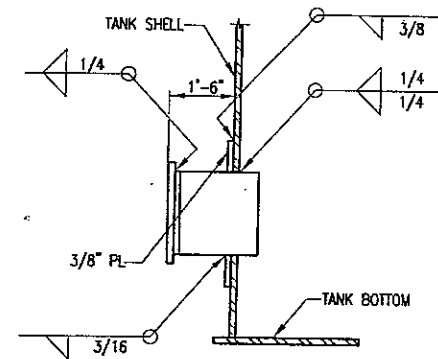
ITEM	DESCRIPTION	SPECIFICATION
1	1/4" ROOF VENT NECK	A36
2	SUPPORT CLIP FOR DOMED HEAD	A36
3	DOMED HEAD & SKIRT	14 GAGE STL
4	BOLT & NUT 3/8"x1"	A307 GALVANIZED
5	SUPPORT CLIP FOR DOMED HEAD	A36
6	BOLT & NUT 1/2"x1"	A307 GALVANIZED
7	SCREEN CLAMP DRIVER	SS
8	CLAMP STRAP	SS
9	CLAMP RETENTION BAND	SS
10	1/2"x1/2" SST MESH PLUS 8 SST	SS

ROOF VENT IS DESIGNED WITH A REMOVABLE HOOD IN ORDER TO ACCEPT A HIGH VOLUME AIR VENTILATOR WHICH RESTS ON THE OPEN TOP OF THE VENT.



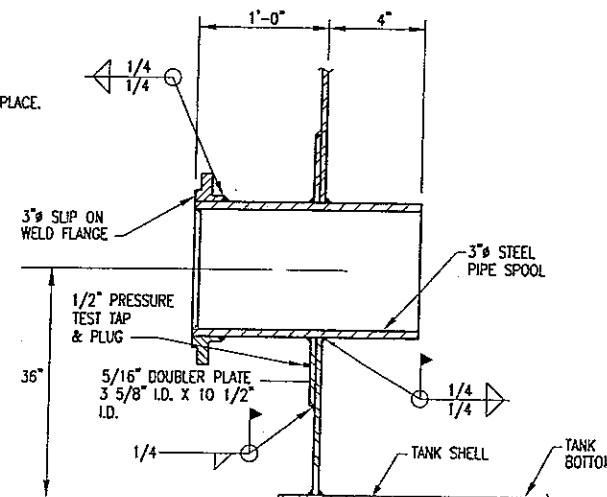
ROOF DECK VENT  
NTS

S-UT7  
UT7



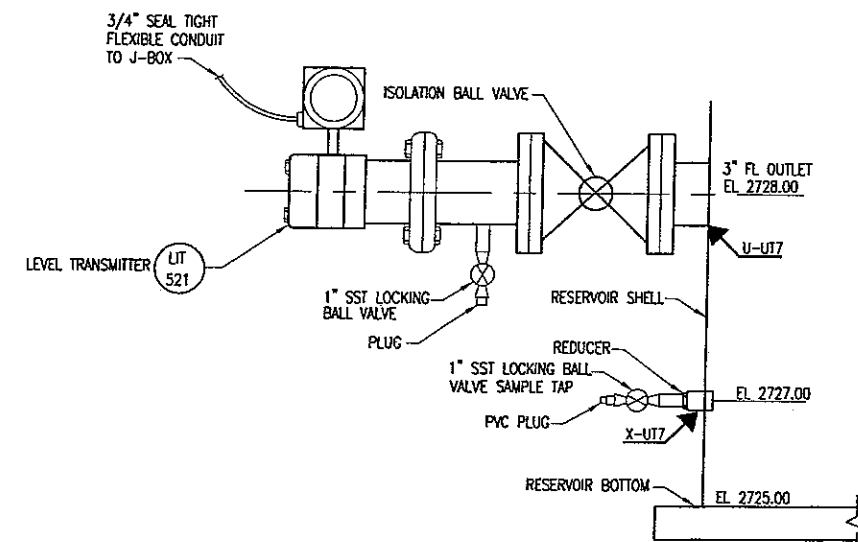
DETAIL  
NTS

Y-UT7  
UT4



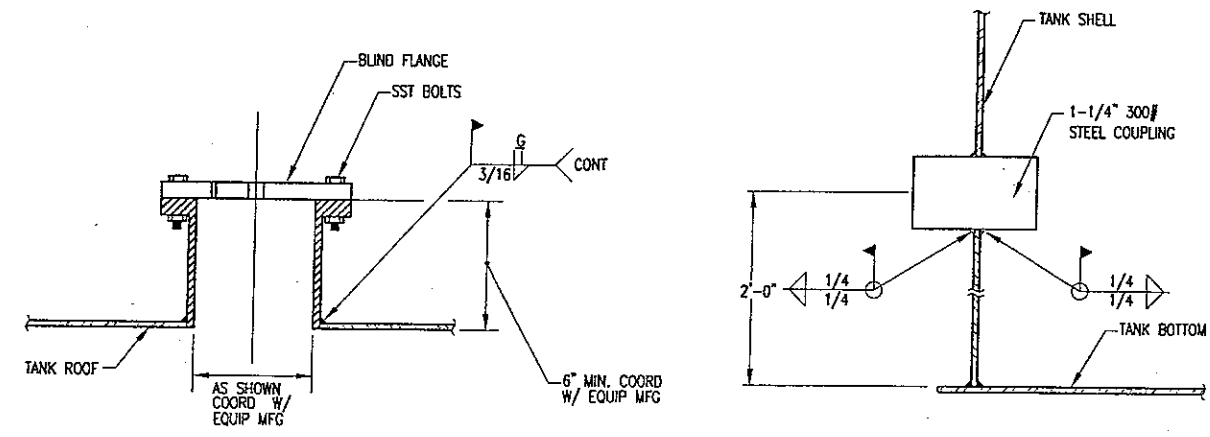
3"  $\phi$  FLANGED NOZZLE ASSEMBLY  
NTS

U-UT7  
UT4, UT7



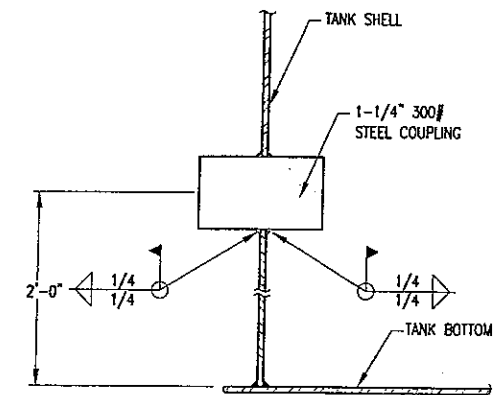
LEVEL TRANSMITTER  
AND SAMPLE TAP  
NTS

Y-UT7  
UT4



4"  $\phi$  FLANGED ROOF NOZZLE ASSEMBLY  
NTS

W-UT7  
UT4



1-1/4"  $\phi$  300# COUPLING ASSEMBLY  
NTS

X-UT7  
UT4, UT7

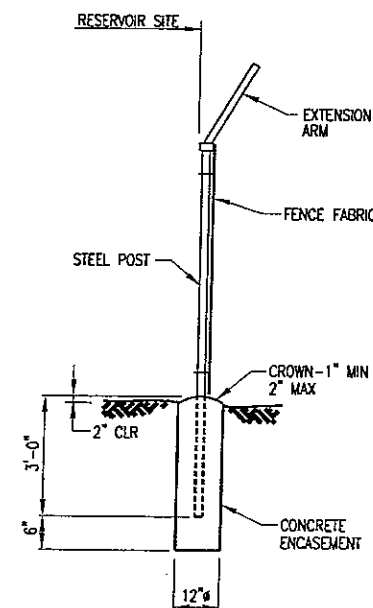
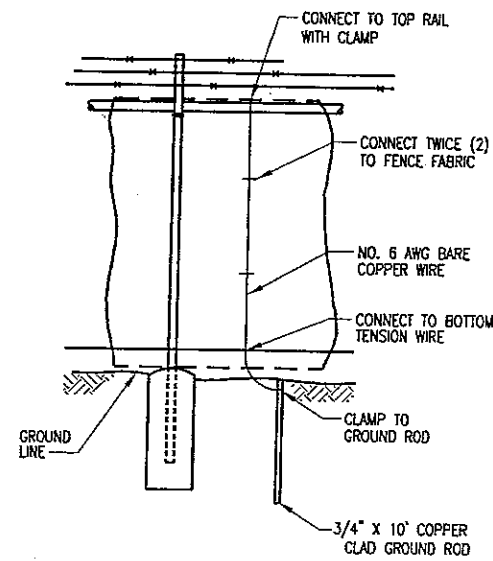
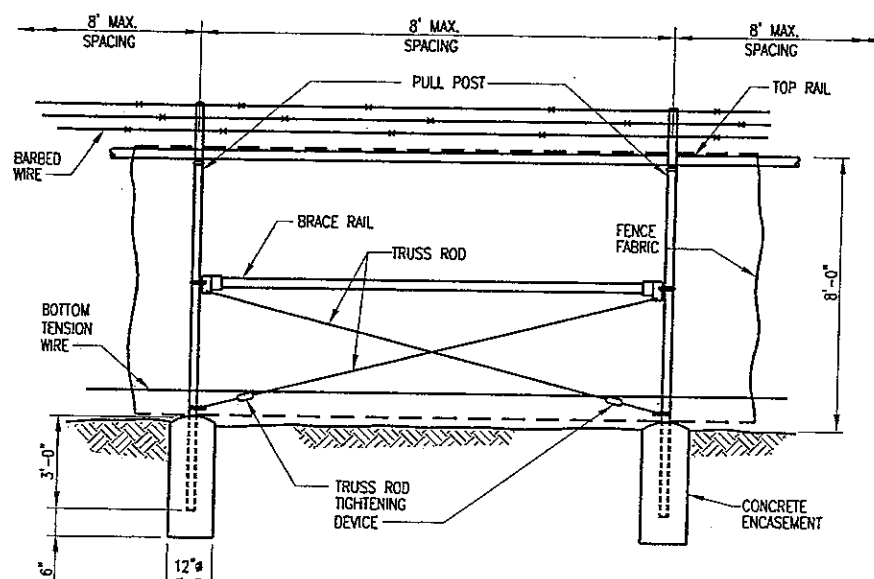
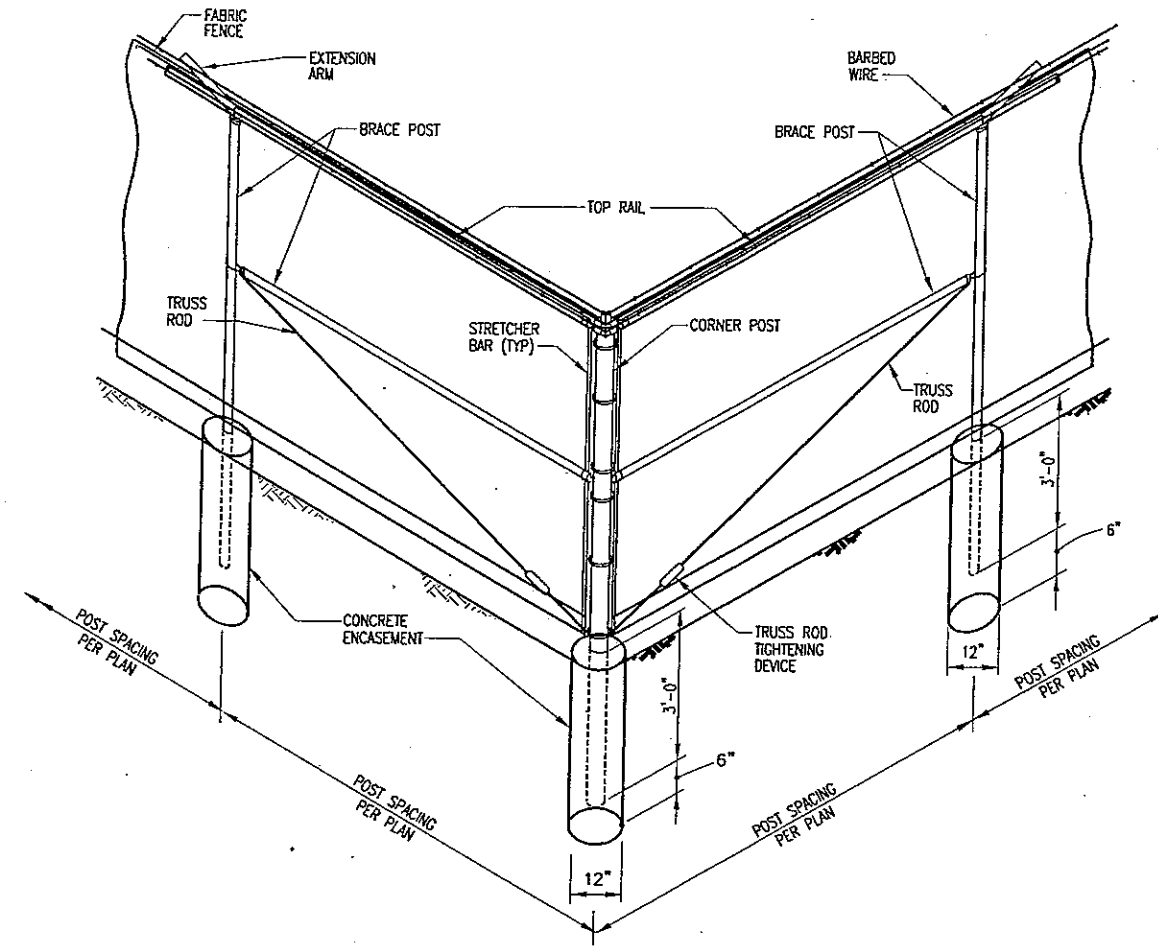
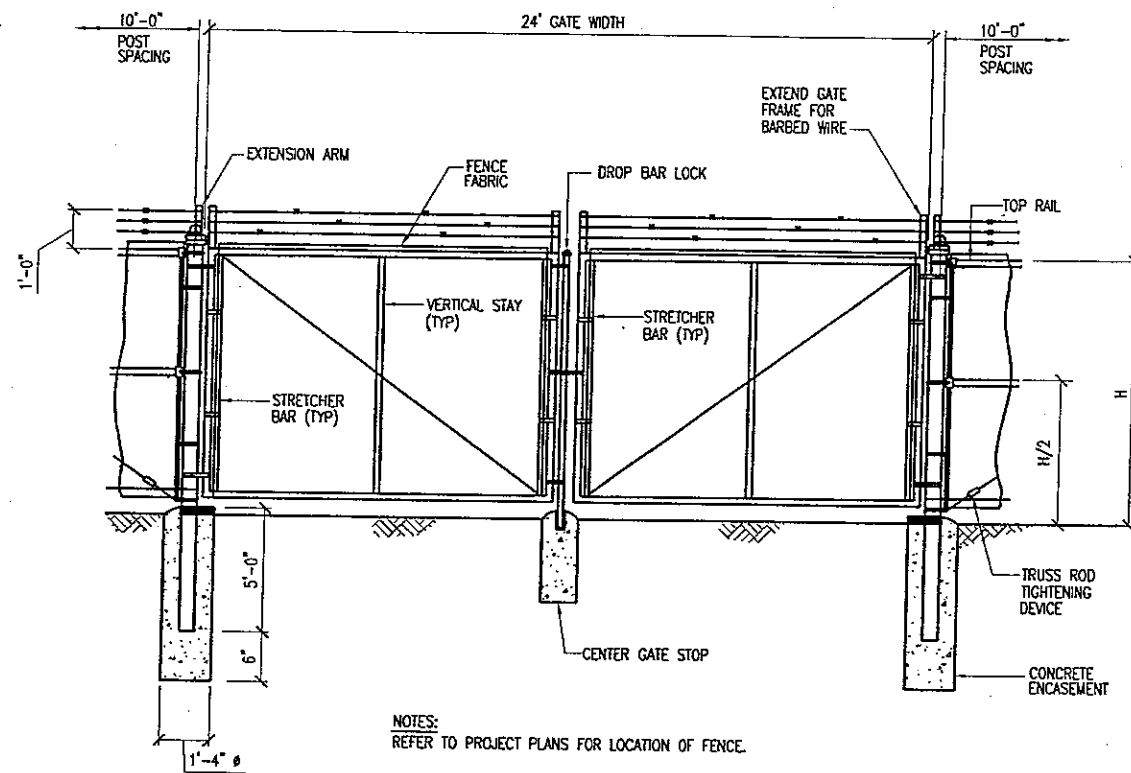
NOT FOR  
CONSTRUCTION

DRAWING NO. 13  
UT7

Stanley Consultants Inc.  
8800 SOUTH CHURCH AVENUE, SUITE 200  
LAS VEGAS, NEVADA 89123 (702) 395-9396  
PROJECT: GOLDEN VALLEY RANCH  
POTABLE WATER  
RESERVOIR 2750 N-1

SCALE (H) AS SHOWN  
SCALE (V) AS SHOWN  
DATE: 1/18/06  
DESIGN BY: BAH  
DRAFTED BY: RDB  
CHECKED BY:  
RHODES HOMES  
2750-NORTH SITE


DATE  
REVISIONS



**DISCLAIMER NOTE**  
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

avoid drilling underground  
utility lines. It's easy.  
Call  
before you  
Dig  
ASK SHER:  
1-800-782-5348  
(1-800-TUNE-IT)

avoid overhead power  
line contact.  
Call  
before you  
Overhead  
1-928-753-5591  
UNCLASH

<div>NOT FOR CONSTRUCTION</div>		<div>SHEET:</div> <div>FENCE AND GATE DETAILS</div>	<div>PROJECT:</div> <div>GOLDEN VALLEY RANCH POTABLE WATER RESERVOIR 2750 N-1</div>	<div><div></div><div>stanley consultants inc. 5820 SOUTH EASTERN AVENUE, SUITE 200 LAS VEGAS, NEVADA 89119 (702) 369-9396 <small>A Stanley Design Company offering architectural, engineering, and construction services worldwide</small></div></div>	SCALE (H) AS SHOWN	SCALE (V) N/A	DESIGN BY: B.J.H.	<div>REVISIONS</div>
					F.L.D. BK. # N/A	D.M.E. 1/18/06	DRAWN BY: RDB	
							CHECKED BY:	
					RHODES HOMES			
					2750-NORTH SITE			
DRAWING NO.		DT 1	14					